

PROJECT AREA MAP

TOWN OF EAST HARTFORD

FINAL DESIGN

PLANS FOR THE EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.

SILVER LANE/SIMMONS RD. TO FORBES ST.

EAST HARTFORD, CONNECTICUT

STATE PROJECT NO. 042-300 - STA 10+00 TO 158+50

STATE PROJECT NO. 042-301 - STA 158+50 TO 209+23.84

F.A.P. NO. PEDS(150) & PEDS(151)

JUNE 1, 2015

LIST OF CTDOT GUIDE SHEETS

DWG. NO.	TITLE
BSM-1	BREAKAWAY SIGN SUPPORTS GENERAL NOTES
BSM-2	BREAKAWAY SIGN SUPPORTS POST SELECTION TABLE 1
BSM-3	BREAKAWAY SIGN SUPPORTS POST SELECTION TABLE 2
BSM-4	BREAKAWAY SIGN SUPPORTS FOUNDATION DETAILS
BSM-5	BREAKAWAY SIGN SUPPORTS BRACKET DETAILS
BSM-6	BREAKAWAY SIGN SUPPORTS HINGE DETAILS
HW-921_02a	SIDEWALK RAMPS SHEET 1
HW-921_02b	SIDEWALK RAMPS SHEET 2
HW-921_02c	SIDEWALK RAMPS SHEET 3
HW-921_02d	SIDEWALK RAMPS SHEET 4
TR_GDS_X	R-SERIES SIGN TYPICAL DETAILS
TR_GDS_Y	S & W-SERIES SIGN TYPICAL DETAILS
TR_GDS_Z	D, E, I, & M-SERIES SIGN TYPICAL DETAILS

DEVELOPED FOR:
TOWN OF EAST HARTFORD
PUBLIC WORKS DEPARTMENT

740 Main Street
East Hartford, Connecticut, 06108

DEVELOPED BY:

VHB Vanasse Hangen Brustlin, Inc.

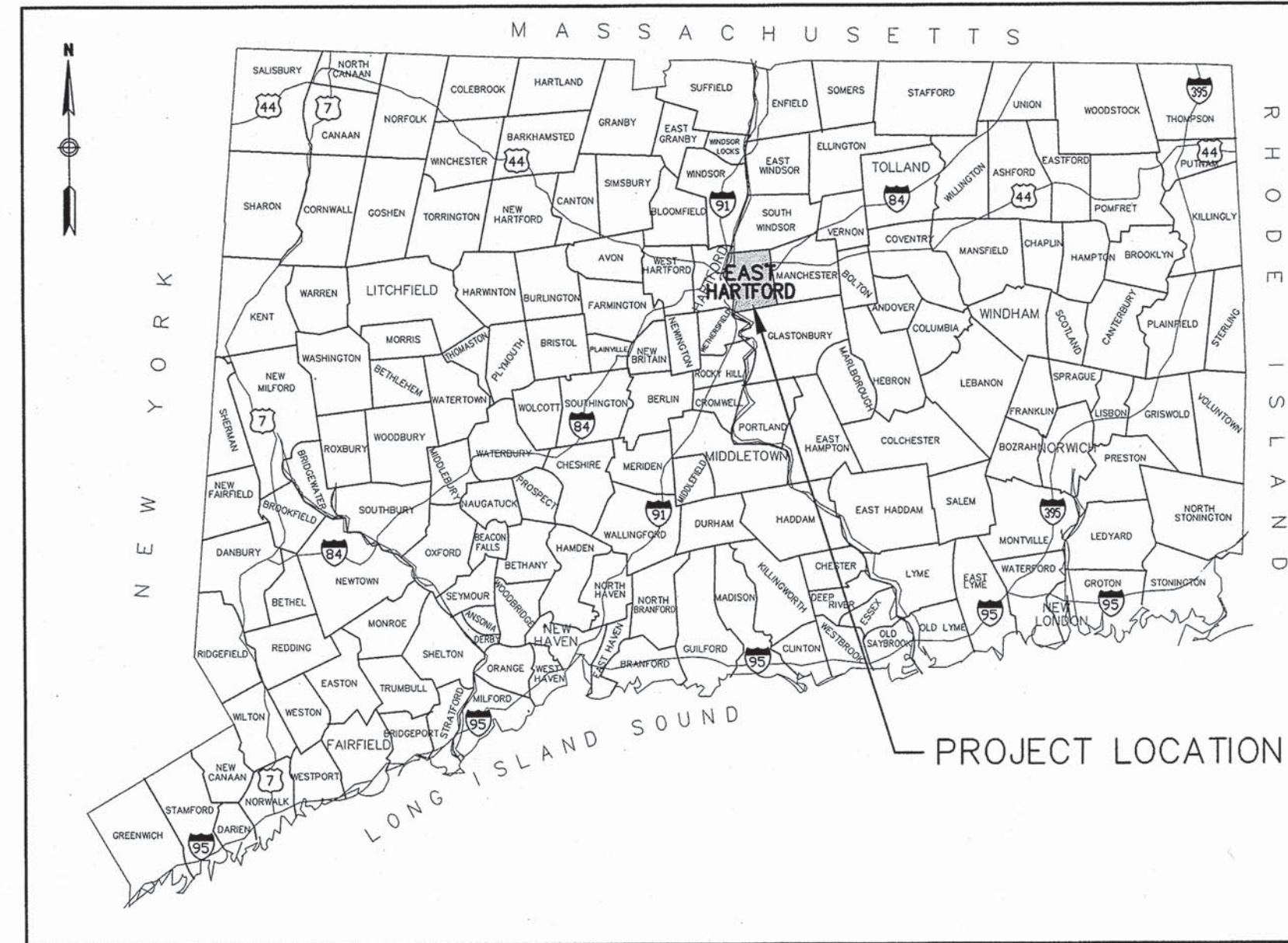
100 Great Meadow Road, Suite 200
Wethersfield, Connecticut 06109
860-807-4300 - FAX 860-372-4570

LIST OF DRAWINGS

DWG. NO.	TITLE	SHEET NO.
	TITLE SHEET	1
GNA-1	LEGEND, ABBREVIATIONS, & GENERAL NOTES	2
EST-1 TO EST-2	DETAILED ESTIMATE	3-4
IN-1 TO IN-2	INDEX PLAN	5-6
TYP-1 TO TYP-3	TYPICAL TRAIL SECTIONS	7-9
MD-1 TO MD-5	MISCELLANEOUS DETAILS	10-14
BLP-1 TO BLP-5	BASELINE LAYOUT PLANS	15-19
CTR-1 TO CTR-2	CONTROL POINTS PLAN	20-21
PL-1 TO PL-6	LAYOUT AND CONSTRUCTION PLAN	22-27
TIE-1	GRANITE CURB TIE PLAN	28
GR-1 TO GR-11	GRADING AND DRAINAGE PLAN	29-39
SPM-1 TO SPM-4	SIGN AND PAVEMENT MARKING PLAN	40-43
S-1 TO S-3	RETAINING WALL SECTIONS DETAILS	44-46
TSP-1	TRAFFIC SIGNAL PLAN - SILVER LANE AT SIMMONS ROAD	47
BOR-1 TO BOR-3	BORING PLAN	48-50

LIST OF CTDOT STANDARD SHEETS

DWG. NO.	TITLE
HR-STD_INDEX	HIGHWAY STANDARD SHEET INDEX
HW-507_01	TYPE "C", "C-L" & DROP INLET CATCH BASIN
HW-507_07	TYPE "C" & "C-L" CATCH BASIN TOPS AND CURBS
HW-507_08	CATCH BASIN FRAMES AND GRATES
HW-507_10	MANHOLE FRAME AND COVER
HW-651_01	C.C.M. PIPE INSTALLATIONS IN FILL & ROCK SLOPES & CULVERT TRENCH DETAIL
HW-652_01	PIPE ENDS
HW-811-01	CURBING
HW-821_02a	45" (1145) F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 1
HW-821_02b	45" (1145) F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 2
HW-910_01	W-BEAM METAL BEAM RAIL HARDWARE
HW-910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL
HW-910_06	R-B 350 BRIDGE ATTACHMENT SAFETY SHAPE PARAPET
HW-911_01	R-B 350 BRIDGE ATTACHMENT TRAILING END
HW-913_01	CHAIN LINK FENCE



LOCATION MAP

DESIGN CRITERIA

AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES
DESIGN SPEED = 20 MPH

APPROVED:

Marcia A. Leclerc
TOWN OF EAST HARTFORD
MARCIA A. LECLERC, MAYOR

6/4/15
DATE

APPROVED:

Denise Horan
TOWN OF EAST HARTFORD
DENISE HORAN, TOWN ENGINEER

6-3-15
DATE

DESIGNED:

Stephen J. O'Neill
VANASSE HANGEN BRUSTLIN, INC
STEPHEN J. O'NEILL P.E. LIC. NO. 19323

6-8-15
DATE



LIST OF CTDOT STANDARD SHEETS (CONTINUED)

DWG. NO.	TITLE
HW-921_01	DRIVEWAY RAMPS AND SIDEWALKS
HW-949_01	PLANTING DETAILS FOR TREES
HW-1806_01a	CT TRUCK MOUNTED IMPACT ATTENUATOR SHEET 1
HW-1806_01b	CT TRUCK MOUNTED IMPACT ATTENUATOR SHEET 2
HW-1806_01c	CT TRUCK MOUNTED IMPACT ATTENUATOR SHEET 3
TR-STD_INDEX	TRAFFIC STANDARD SHEET INDEX
TR-1001_01	TRENCHING AND BACKFILLING ELECTRICAL CONDUIT
TR-1002_01	TRAFFIC CONTROL FOUNDATIONS
TR-1010_01	CONCRETE HANDHOLE
TR-1102_01	PEDESTALS AND PEDESTRIAN SIGNALS
TR-1107_01	PEDESTRIAN PUSH BUTTONS
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS
TR-1210_03	SPECIAL DETAILS & TYPICAL PAVEMENT MARKINGS FOR TWO-WAY HIGHWAYS
TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

2004 SPECIFICATIONS, FORM 816 INCLUDING ALL
SUPPLEMENTS THERETO GOVERN.

LEGEND

UNDERGROUND TELEPHONE	
UNDERGROUND WATER	
SANITARY SEWER	
STORM SEWER	
CONTOUR LINE	
WOOD FENCE	
CHAIN LINK FENCE	
GUARD RAIL	
HEDGE LINE	
WETLAND LINE	
FLOODWAY LINE	
100 YEAR FLOOD PLAIN LINE	
EASEMENT LINE	
EDGE OF WATER	
CUT LINE	
FILL LINE	
IRON PIN	
SURVEY MONUMENT	
DRILL HOLE	
CURB CATCHBASIN	
CURBLESS CATCHBASIN	
UTILITY POLE	
UTILITY POLE WITH GUY	
WATER SHUT OFF	
HYDRANT	
GATE VALVE	
SANITARY MANHOLE	
MANHOLE	
TELEPHONE MANHOLE	
LIGHT STAND	
HAND HOLE	
METAL COVER	
SINGLE POST SIGN	
DOUBLE POST SIGN	
SHRUB/BUSH	
TREE	

UTILITY CONTACTS

COMCAST OF CONNECTICUT
MR. DEAN MURATORI
CONSTRUCTION MANAGER
80 GREAT HILL ROAD
SEYMOUR, CT 06483
203-732-0146

FIBER TECHNOLOGIES NETWORK, LLC
BETH BANNISTER, CONSTRUCTION MANAGER
1781 HIGHLAND AVENUE, SUITE 102
CHESHIRE, CT 06410
860-432-4240

LEVEL 3 COMMUNICATIONS, LLC
RICK MILLER
1025 EL DORADO BOULEVARD
BROOMFIELD, CO 80021
720-888-7568

METROPOLITAN DISTRICT COMMISSION
MR. RICHARD NORRIS, P.E.
555 MAIN STREET, P.O. BOX 800
HARTFORD, CT 06142
860-278-7850

FRONTIER COMMUNICATIONS
MR. TERRY SHEA
1441 NORTH COLONY ROAD
MERIDEN, CT 06450
860-725-1276

EVERSOURCE ENERGY
MR. STEVE WELLS
107 SELDON STREET
BERLIN, CT 06037
860-280-2417

CONNECTICUT NATURAL GAS CORPORATION, ENGINEERING DEPARTMENT
MR. VASANT C. PATEL
76 MEADOW STREET, 1ST FLOOR
EAST HARTFORD, CT 06108
860-727-3114

BUCKEYE PIPE LINE, L.P.
MR. PATRICK LA FOUNTAIN
50 BURBANK ROAD
WETHERSFIELD, CT 06109
860-883-2295

ABBREVIATIONS

GENERAL	
PR/PROP	PROPOSED
MIN	MINIMUM
MAX	MAXIMUM
ACR	ACCESSIBLE CURB RAMP
EX/EXIST	EXISTING
EL/ELEV	ELEVATION
CONC	CONCRETE
HMA	HOT MIX ASPHALT
NTS	NOT TO SCALE
TYP	TYPICAL
APPROX	APPROXIMATE
R.O.W.	RIGHT-OF-WAY
R.O.W.	RIGHT-OF-WAY
BIT	BITUMINOUS
RT	RIGHT
LT	LEFT
SWK	SIDEWALK
SWL	SINGLE WHITE LINE
DRWY	DRIVEWAY
CP	CONTROL POINT
N/F	NOW OR FORMERLY
UTILITY	
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
INV	INVERT ELEVATION
HH	HANDHOLE
TF	TOP OF FRAME
CB	CATCH BASIN
MH	MANHOLE
LP	LIGHT POLE

PRATT & WHITNEY
MR. DAVID BILLARD
FACILITIES PROJECT ENGINEER
FACILITIES AND SERVICE OPERATIONS
400 MAIN STREET
EAST HARTFORD, CT 06108
860-565-4242

GENERAL NOTES

SURVEY NOTES:

- THE PROPERTY LINES SHOWN ON THIS PLAN WERE COMPILED FROM LOCAL ASSESSOR'S PLATS AND FROM PREVIOUS PLANS AND DEEDS OF RECORD. GM2 ASSOCIATES, INC., AND VHB, HAVE NOT PERFORMED A FIELD SURVEY TO VERIFY THE PROPERTY LINES.
- THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY GM2 ASSOCIATES, INC. COMPLETED JUNE 2007 AND BY VHB COMPLETED NOVEMBER, 2014.
- THE HORIZONTAL AND VERTICAL VALUES SHOWN ON THIS PLAN ARE BASED ON CTNAD 1983 AND NGVD 1929 DATUMS.
- A SURVEY SHALL BE PROVIDED BY THE CONTRACTOR TO ENSURE THE MONUMENTATION HAS BEEN SET/RESET TO ITS PROVIDED LOCATION. PLEASE REFER TO SPECIAL PROVISION 0980001A FOR DETAILS OF THE CONCRETE MONUMENT AND BRASS DISK INSTALLATION.

UNDERGROUND UTILITY NOTES:

- THE CONTRACTOR IS TO CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455, 48-HOURS BEFORE EXCAVATING.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, WITHIN PUBLIC RIGHTS OF WAY, CONTRACTOR SHALL CONFIRM THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES.
- BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE SHOWN WHEREVER POSSIBLE. THE CONTRACTOR IS TO ASSUME THAT SERVICES ARE PRESENT TO ALL BUILDINGS. THEIR LOCATIONS ARE TO BE CHECKED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE ENGINEER FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
- THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ENGINEER.
- PRIOR TO THE START OF CONSTRUCTION, TEST PITS SHOULD BE DUG AS NECESSARY TO DETERMINE THE SIZES, LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES. ANY CONFLICTS NOTED IN PROPOSED CONSTRUCTION SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE CAUSING AN INTERRUPTION IN SAID SERVICE, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE AFFECTED UTILITY AND PERFORM THE WORK AS DETAILED BY THE UTILITY AS NEEDED TO RESTORE SERVICE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL NOT CONTINUE WORK OPERATIONS UNTIL THE SERVICE IS RESTORED.

SEDIMENTATION AND EROSION CONTROL NOTES:

- THE CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL SYSTEMS (SEDIMENT TRAP) AT CATCH BASINS WITHIN THE PROJECT LIMITS AS WELL AS THOSE DOWNSTREAM OF ANY CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR MUST INSPECT AND MAINTAIN EROSION CONTROL MEASURES AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE SPECIFICATIONS.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM THE ENTIRE DRAINAGE AND SEWER SYSTEMS.
- PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- THE CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.

DRAINAGE NOTES:

- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS, AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR. THE INFORMATION SHALL BE FURNISHED IN WRITING TO THE ENGINEER FOR THE RESOLUTION OF THE CONFLICT.
- RIM ELEVATIONS OF PROPOSED DRAINAGE MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISHED GRADE WITHIN LIMITS OF WORK.
- WHEN INSTALLING A NEW PIPE THAT REQUIRES A CONNECTION TO AN EXISTING PIPE, THE NEW PIPE CONNECTION SHALL BE MADE AT THE JOINT OF THE EXISTING PIPE NEAREST TO THE PROPOSED PIPE.
- WHEN INSTALLING A NEW CATCH BASIN THAT REQUIRES A CONNECTION TO AN EXISTING PIPE, THE SECTION OF THE EXISTING PIPE DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH NEW PIPE OF SIMILAR SIZE AND TYPE EXTENDING FROM THE CATCH BASIN TO THE NEAREST JOINT OF EXISTING PIPE.
- ALL CATCH BASIN GRATES ON ARE TO BE TYPE "A".

GENERAL CONSTRUCTION NOTES:

- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE CONDITIONS OF APPROVAL OUTLINED IN ALL STATE AND LOCAL PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THIS INFORMATION PRIOR TO CONSTRUCTION AND CONFORMING TO THE CONDITIONS AS REQUIRED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- HANDICAP ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
- ACCESS TO RESIDENCES AND BUSINESSES SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. THE COSTS ASSOCIATED WITH COORDINATING AND MAINTAINING ACCESS TO RESIDENCES AND BUSINESSES SHALL BE INCLUDED IN THE LUMP SUM COST FOR "MAINTENANCE AND PROTECTION OF TRAFFIC".
- TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR IS ADVISED THAT ADDITIONAL "NOTES" MAY BE FOUND ON SUBSEQUENT SHEETS OF THE CONTRACT PLANS AND SUCH "NOTES" WHILE PERTAINING TO THE SPECIFIC DRAWINGS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
- FINAL LOCATION, LENGTHS AND WIDTHS OF DRIVEWAYS MAY BE MODIFIED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
- EXCEPT AS NOTED, THE PROJECT SPECIFIC PLANS AND DETAILS CONTAINED HEREIN SHALL TAKE PRECEDENCE OVER THE STANDARD DETAILS.
- PUBLIC TELEPHONES, MAILBOXES, BOLLARDS, ETC THAT ARE NOT NOTED TO BE REMOVED SHALL REMAIN IN PLACE AND SHALL BE PROTECTED THROUGHOUT THE DURATION OF CONSTRUCTION. ACCESS TO THESE FACILITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- ALL CURB TIES (STATION AND OFFSETS) ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- PRIOR TO SUBMITTING A BID, THE CONTRACTOR MUST VISIT THE SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE WORK TO BE PERFORMED. NO COMPENSATION SHALL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH THE SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS.
- THE CONTRACTOR SHALL OBTAIN A CONNECTICUT DEPARTMENT OF TRANSPORTATION ENCROACHMENT PERMIT FROM THE DISTRICT ONE OFFICES PRIOR TO COMMENCING WORK ON STATE ROADWAYS. ALL COSTS TO OBTAIN ENCROACHMENT PERMITS SHALL BE INCLUDED IN THE COST OF THE CONTRACT WORK ITEMS.
- IN LOCATIONS WHERE THE PROPOSED TREELINE IS DENOTED, IT IS MEANT AS A GRAPHICAL NOTATION ONLY. THE PROPOSED TREELINE SHALL BE AT THE LIMIT OF GRADING.
- THE CONTRACTOR SHALL ESTABLISH TURN AROUND AREAS AS REQUIRED AND AS APPROVED BY THE ENGINEER. TURN AROUND AREAS SHALL BE LOCATED OUTSIDE OF ALL ENVIRONMENTALLY REGULATED AREAS.

				DESIGNER: EN	<div>Vanasse Hangen Brustlin, Inc.</div> <div>Transportation Land Development Environmental Services</div>		PROJECT TITLE:	TOWN:	PROJECT NO.:
				DRAFTER: EN			EAST HARTFORD MULTI-USE TRAIL	EAST HARTFORD, CONNECTICUT	42-300/301
				CHECKED BY: CF			CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.	DRAWING TITLE:	DRAWING NO.:
				APPROVED BY: SON			SILVER LANE/SIMMONS RD. TO FORBES ST.	LEGEND, ABBREVIATIONS & GENERAL NOTES	GNA-1
REV.	DATE	DESCRIPTION			PLANS ISSUED: ISSUED FOR CONSTRUCTION	DATE: 6/1/2015	CADD GNA-00000-V4101900.dwg		SHEET NO.:
		REVISIONS							2

Item Number	201001A	202000	202451A	202461	202503	202513	202529	203000	205003	205004	206001	210100A	212000	216000	219003	219011A	304002	401441	402601A	406125	406171	406172	406173	408236	507006	507026	507067	507201	507567	507701
Item	CLEARING AND GRUBBING	EARTH EXCAVATION	TEST PIT EXCAVATION	REMOVAL OF GRANITE STONE CURBING	REMOVAL OF CONCRETE CURBING	REMOVAL OF CONCRETE SIDEWALK	CUT BITUMINOUS CONCRETE PAVEMENT	STRUCTURE EXCAVATION - EARTH	TRENCH EXCAVATION 0-10' DEEP	ROCK IN TRENCH EXCAVATION 0-10' DEEP	FORMATION OF SUBGRADE	STABILIZED CONSTRUCTION EXIT	SUBBASE	PERVIOUS STRUCTURE BACKFILL	SEDIMENTATION CONTROL SYSTEM FILTER FABRIC SYSTEM	SEDIMENTATION CONTROL AT CATCH BASIN	PROCESSED AGGREGATE BASE	1/2" PREFORMED EXPANSION JOINT FILLER	GRANITE BLOCK PAVING	BITUMINOUS CONCRETE SURFACE PATCH	HMA S0.50	HMA S0.375	HMA S0.25	MATERIAL FOR TACK COAT	TYPE C CATCH BASIN TOP	TYPE "C" CATCH BASIN WITH 4' SUMP	TYPE "C-L" CATCH BASIN WITH 4' SUMP	TYPE "C-L" CATCH BASIN	MANHOLE FRAME AND COVER	RESET TYPE C CATCH BASIN
Unit	LS	CY	CY	LF	LF	SF	LF	CY	CY	CY	SF	SF	CY	CY	LF	EA	CY	SF	SF	SF	TON	TON	TON	GAL	EA	EA	EA	EA	EA	EA
State Project No. 042-300	0.4	4800	10	40	320	1500	250	0	225	10	10500	600	0	0	5400	7	2300	0	1000	12	875	550	550	600	3	1	4	0	1	3
State Project No. 042-301	0.6	2500	6	0	0	0	350	460	60	5	8000	0	325	371	5500	1	1500	27	0	0	0	550	550	425	0	0	0	1	0	0
Total	1	7,300	16	40	320	1,500	600	460	285	15	18,500	600	325	371	10,900	8	3,800	27	1,000	12	875	1,100	1,100	1,025	3	1	4	1	1	3

[illegible][illegible]

Item Number	Item	816001	816002	821177	901004A	906202A	906203A	910170	910174	911923	911924	912489	913900	913911A	913921	913722	913942A	916405A	921001A	921013	943001	944000	949948	950005A	970007A	971001A	975004A	977001	978002	979003A	980011A
		GRANITE SLOPE CURBING	CURVED GRANITE SLOPE CURBING	PRECAST CONCRETE BARRIER CURB (V" SHAPE - SINGLE FACE)	REMOVABLE BARRIER POST	WOOD RAIL FENCE	WOOD RAIL FENCE MOUNTED ON WALL	METAL BEAM RAIL (RB-350)	R-B 350 BRIDGE ATTACHMENT - JERSEY SHAPED PARAPET	R-B END ANCHORAGE - TYPE I	R-B END ANCHORAGE - TYPE II	REMOVE CABLE GUIDE RAIL	REMOVE CHAIN LINK FENCE	5' CHAIN LINK FENCE MOUNTED ON BARRIER	6' CHAIN LINK FENCE	12' WIDE FENCE GATE 6' HIGH	DOUBLE SWING GATE	REMOVE NOISE BARRIER WALL	CONCRETE SIDEWALK	CONCRETE DRIVEWAY APRON	WATER FOR DUST CONTROL	FURNISHING AND PLACING TOPSOIL	GLEDITSIA TRIACANTHOS INERMIS THORNLESS HONEY LOCUST SHADE-MASTER 3"-3 1/2" CAL. B.B.	TURF ESTABLISHMENT	TRAFFICPERSON (UNIFORMED FLAGGER)	MAINTENANCE AND PROTECTION OF TRAFFIC	MOBILIZATION	TRAFFIC CONES	TRAFFIC DRUMS	CONSTRUCTION BARRICADE TYPE III	CONSTRUCTION STAKING AND RIGHT OF WAY MONUMENTATION
Unit		LF	LF	LF	EA	LF	LF	LF	EA	EA	EA	LF	LF	LF	LF	EA	EA	LF	SF	SF	M.GAL	SY	EA	SY	HR	LS	LS	EA	EA	EA	LS
State Project No. 042-300		75	132	0	1	340	0	900	0	3	1	600	100	0	2850	1	1	0	1000	350	550	5500	2	5500	350	0.4	0.4	50	50	6	0.4
State Project No. 042-301		0	0	350	2	40	215	2200	1	1	0	700	1850	350	2700	0	0	50	0	0	575	4000	0	4000	520	0.6	0.6	50	75	2	0.6
Total		75	132	350	3	380	215	3,100	1	4	1	1,300	1,950	350	5,550	1	1	50	1,000	350	1,125	9,500	2	9,500	870	1	1	100	125	8	1

Item Number																															
Item	992000A	1001001	1002208	1003009A	1008115	1008008A	1010028	1010801A	1010807	1102002	1108001A	1108003A	1108004A	1107007A	1108163A	1113108	1118012A	1203109	1206023A	1208898	1208928	1028829A	1210101A	1210102A	1210105A	1211001	1220013A	1302060A	1302062A	1403001A	1608200
	ORNAMENTAL BENCH	TRENCHING AND BACKFILLING	TRAFFIC CONTROL FOUNDATION-PEDESTAL - TYPE 1	REMOVE AND RELOCATE LIGHT STANDARD AND CONCRETE BASE	2" RIGID METAL CONDUIT - IN TRENCH	CLEAN EXISTING CONDUIT	CONCRETE HANDHOLE EXTENSION - TYPE 2	REMOVE AND RELOCATE CONCRETE HANDHOLE	MODIFICATION OF EXISTING CONCRETE HANDHOLES	8" ALUMINUM PEDESTAL	1 WAY PEDESTRIAN SIGNAL POLE MOUNTED	1 WAY PEDESTRIAN SIGNAL PEDESTAL MOUNTED	2 WAY PEDESTRIAN SINGAL PEDESTAL MOUNTED	PEDESTRIAN PUSHBUTTON AND SIGN (PIEZO)	MODIFY EXISTING CONTROLLER	7 CONDUCTOR NO. 14 CABLE	REMOVAL AND/OR RELOCATION OF TRAFFIC SIGNAL EQUIPMENT	SIDE MOUNTED SIGN FOUNDATION	REMOVAL AND RELOCATION OF EXISTING SIGNS	SIGN FACE - SHEET ALUMINUM BRIGHT WIDE ANGLE RETROREFLECTIVE SHEETING	SIGN FACE - SHEET ALUMINUM - TYPE III REFLECTIVE SHEETING	DIRECTIONAL SIGN	4" WHITE EPOXY RESIN PAVEMENT MARKINGS	4" YELLOW EPOXY RESIN PAVEMENT MARKINGS	EPOXY RESIN PAVEMENT MARKINGS, SYMBOLS & LEGENDS	REMOVAL OF PAVEMENT MARKINGS	CONSTRUCTION SIGNS - BRIGHT FLUORESCENT SHEETING	ADJUST GATE BOX (WATER)	ADJUST GATE BOX (GAS)	RESET MANHOLE (SANITARY SEWER)	FURNISHING AND USE OF PORTABLE IMPACT ATTENUATION SYSTEM TYPE D-1
Unit	EA	LF	EA	EA	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LS	EA	LS	SF	SF	SF	LF	LF	SF	SF	SF	EA	EA	EA	HR
State Project No. 042-300	1	35	2	1	35	200	0	3	2	2	1	1	1	3	1	320	1	0	0.2	20	200	12	3500	1100	1700	1100	250	6	1	1	0
State Project No. 042-301	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0.8	4	15	12	50	625	20	0	300	0	0	0	240
Total	1	35	2	1	35	200	1	3	2	2	1	1	1	3	1	320	1	2	1	24	215	24	3,550	1,725	1,720	1,100	550	6	1	1	240

REV.	DATE	DESCRIPTION	SHEET. NO.	
		REVISIONS		

DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

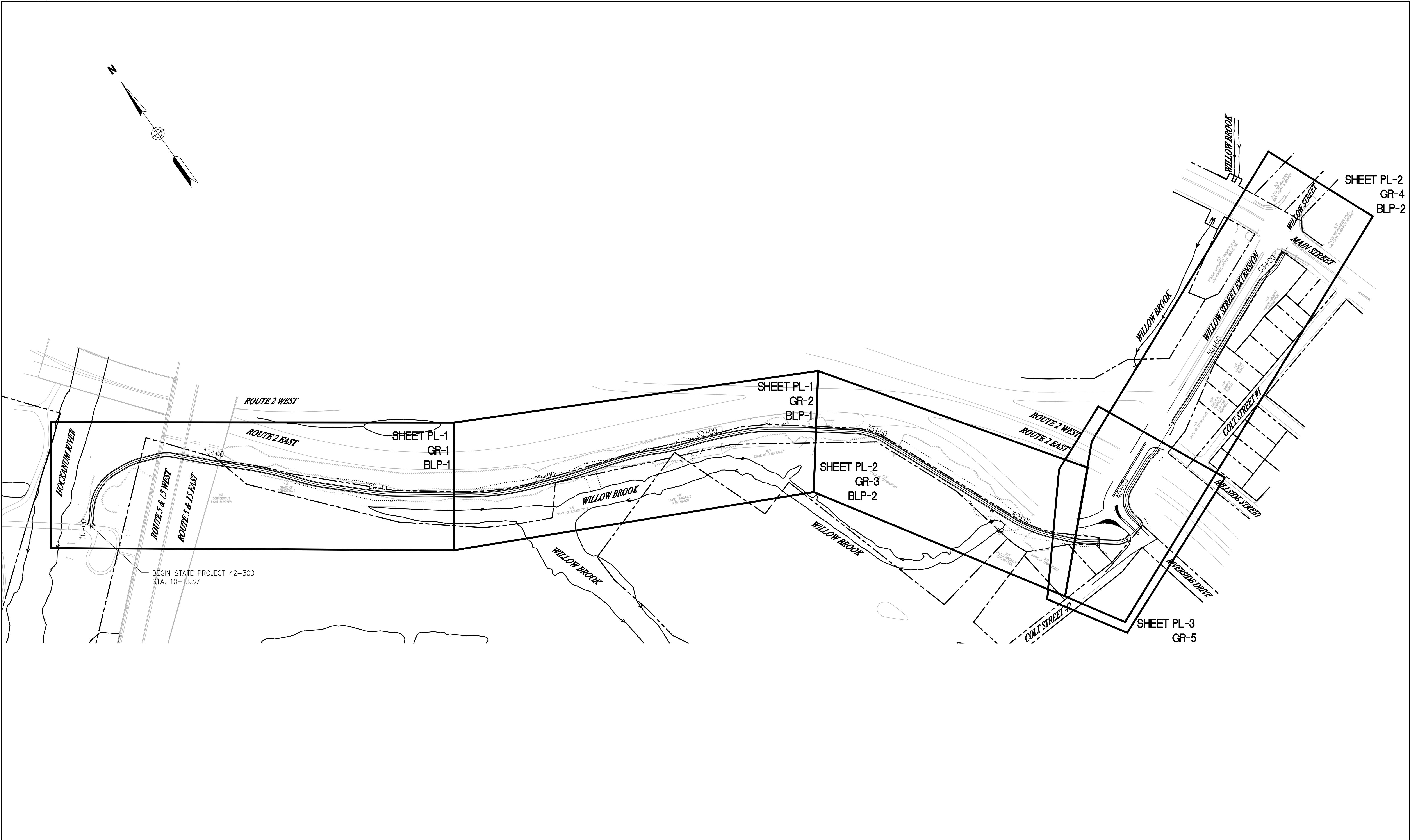
Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



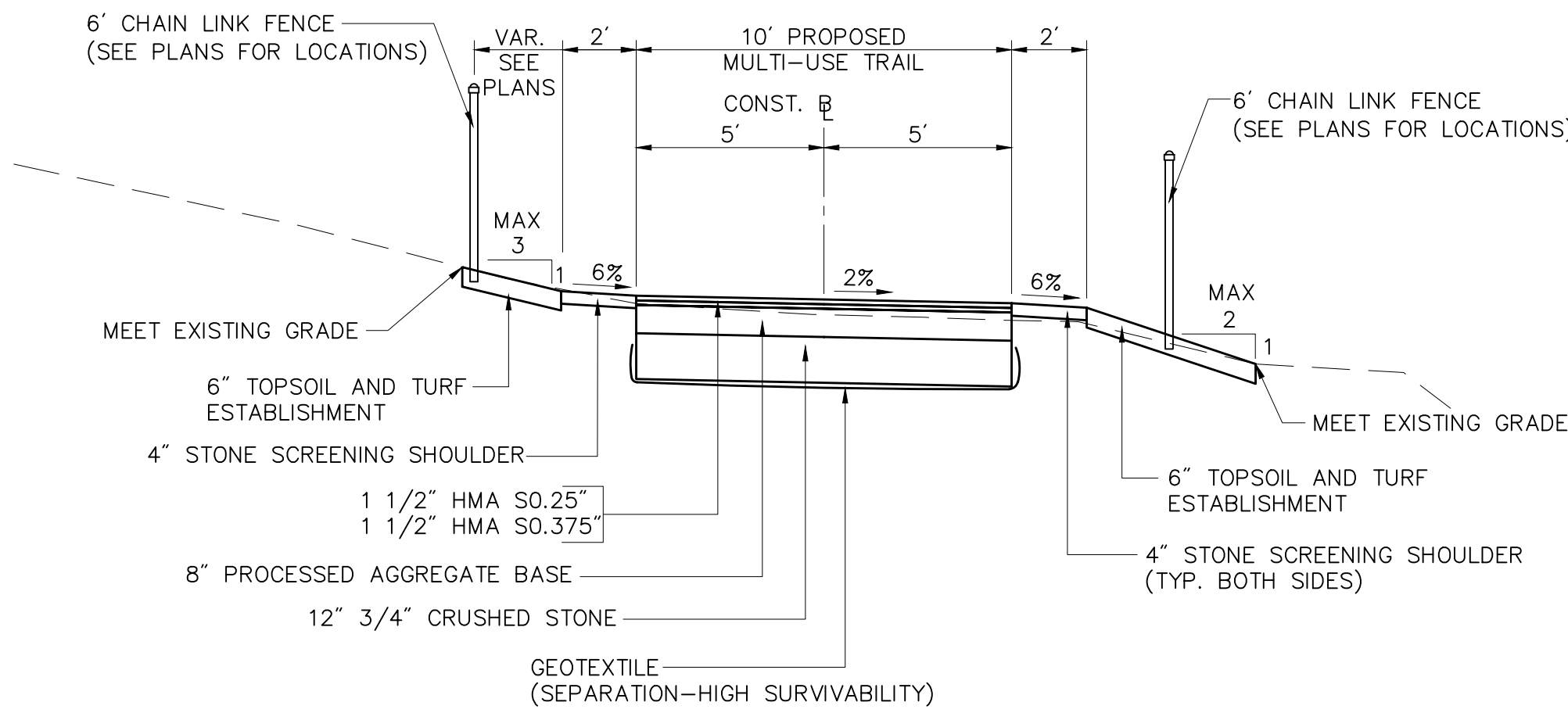
PROJECT TITLE:
EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.
CADD EST_4101900.dwg

TOWN:
EAST HARTFORD, CONNECTICUT
DRAWING TITLE:
DETAILED ESTIMATE

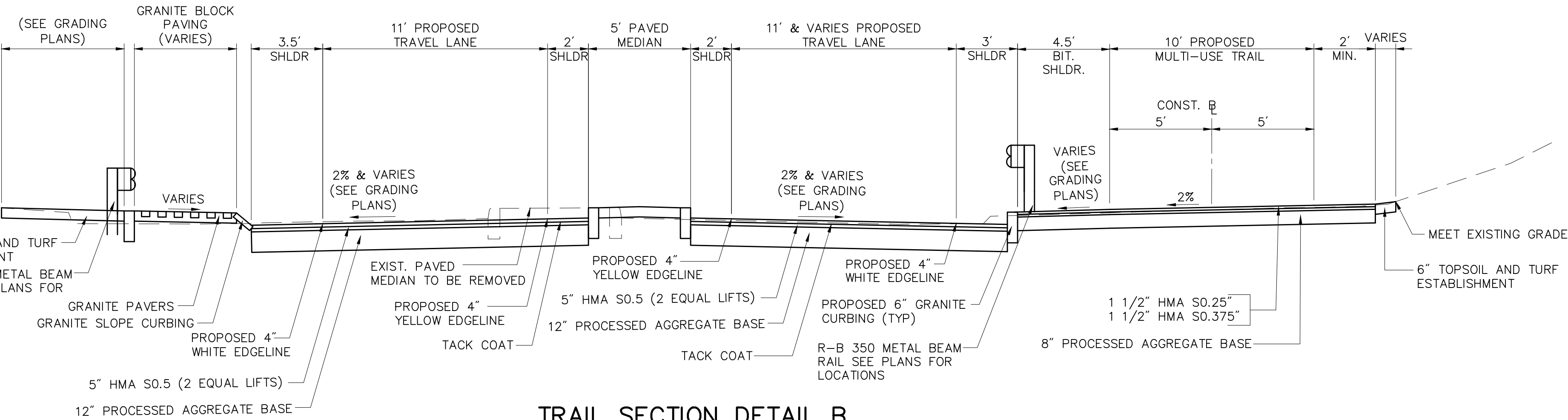
PROJECT NO.:
42-300/301
DRAWING NO.:
EST-2
SHEET NO.:
04



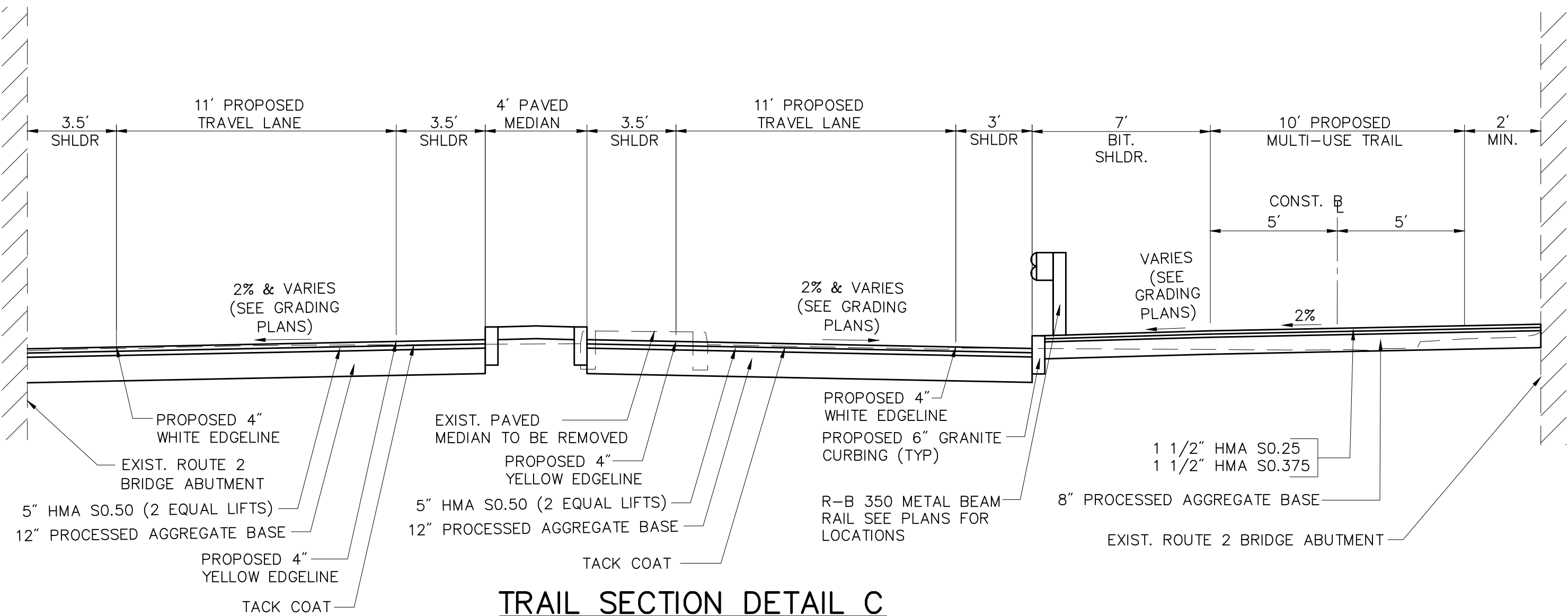
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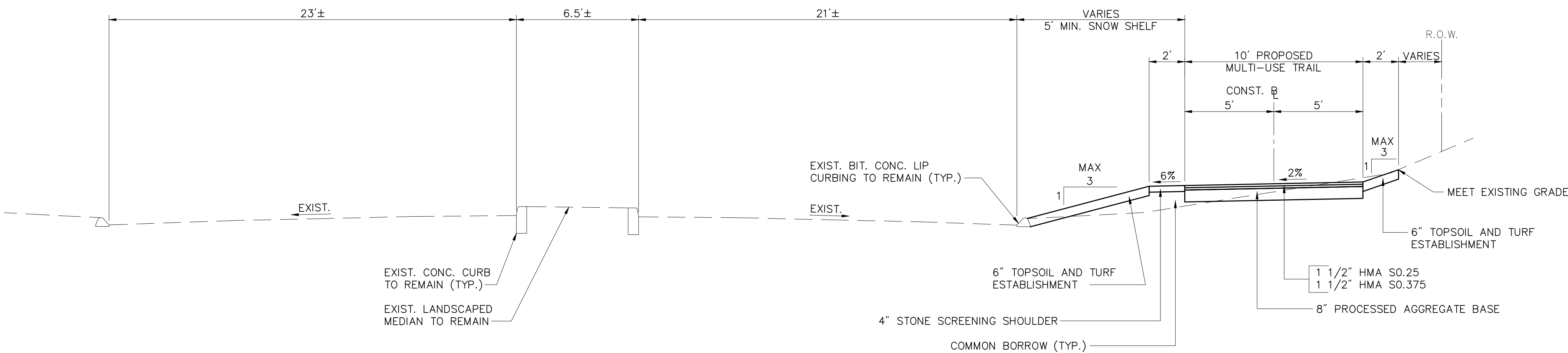
TRAIL SECTION DETAIL A
STA. 10+13.57 TO 43+44



TRAIL SECTION DETAIL B
STA. 43+85 TO 44+70



TRAIL SECTION DETAIL C
STA. 44+70 TO 46+61



TRAIL SECTION DETAIL D
STA. 47+22 TO 53+54.49

REV.	DATE	DESCRIPTION	SHEET NO.

DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

NOT TO SCALE

Vanasse Hangen Brustlin, Inc.

Transportation Land Development Environmental Services

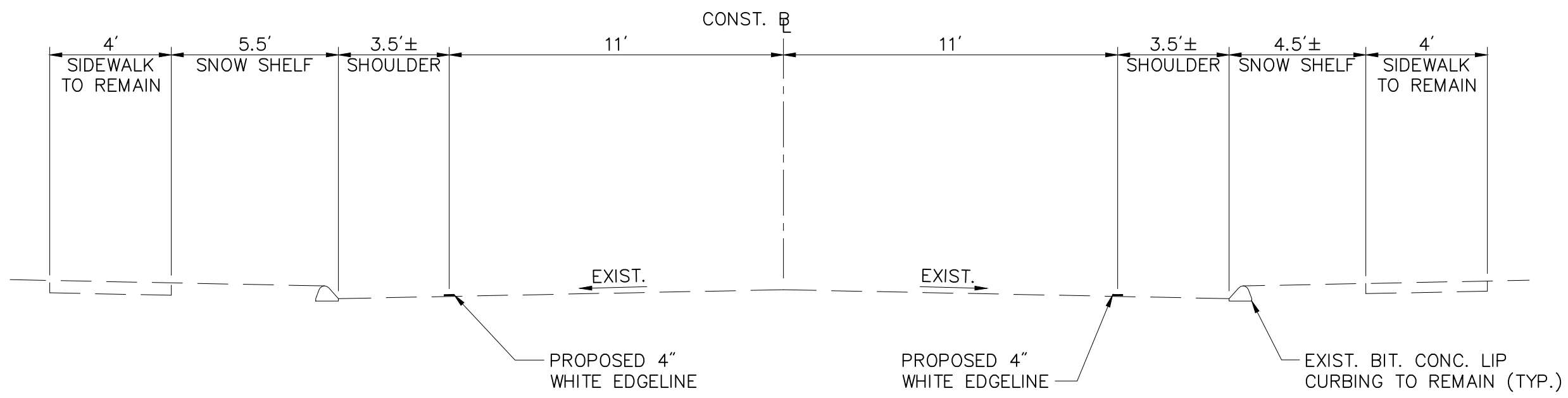
PLANS ISSUED: ISSUED FOR CONSTRUCTION

DATE: 6/1/2015

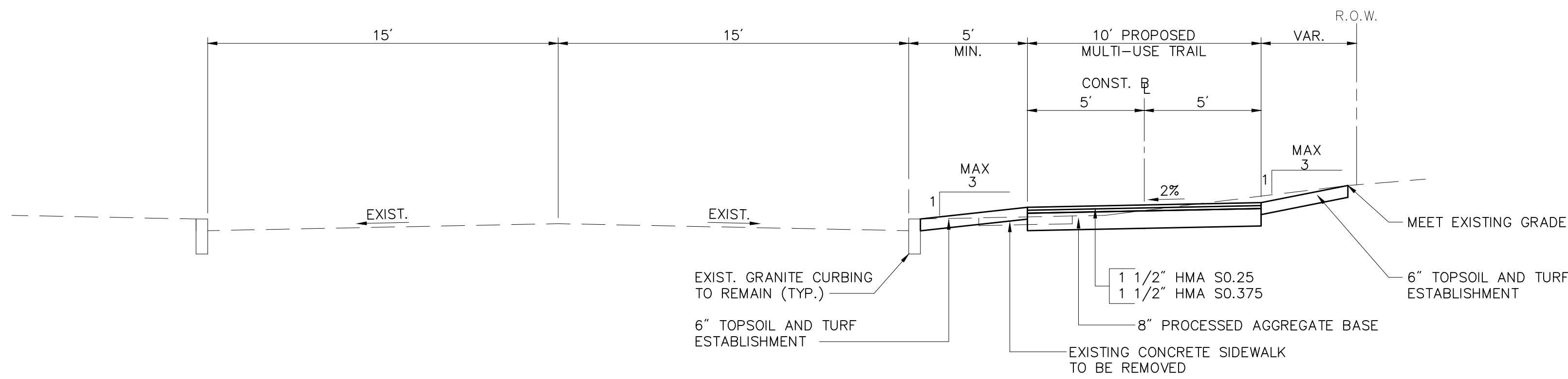
PROJECT TITLE:
EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.
CADD TYP-00000-V4101900.dwg

TOWN:
EAST HARTFORD, CONNECTICUT
DRAWING TITLE:
TYPICAL TRAIL SECTIONS

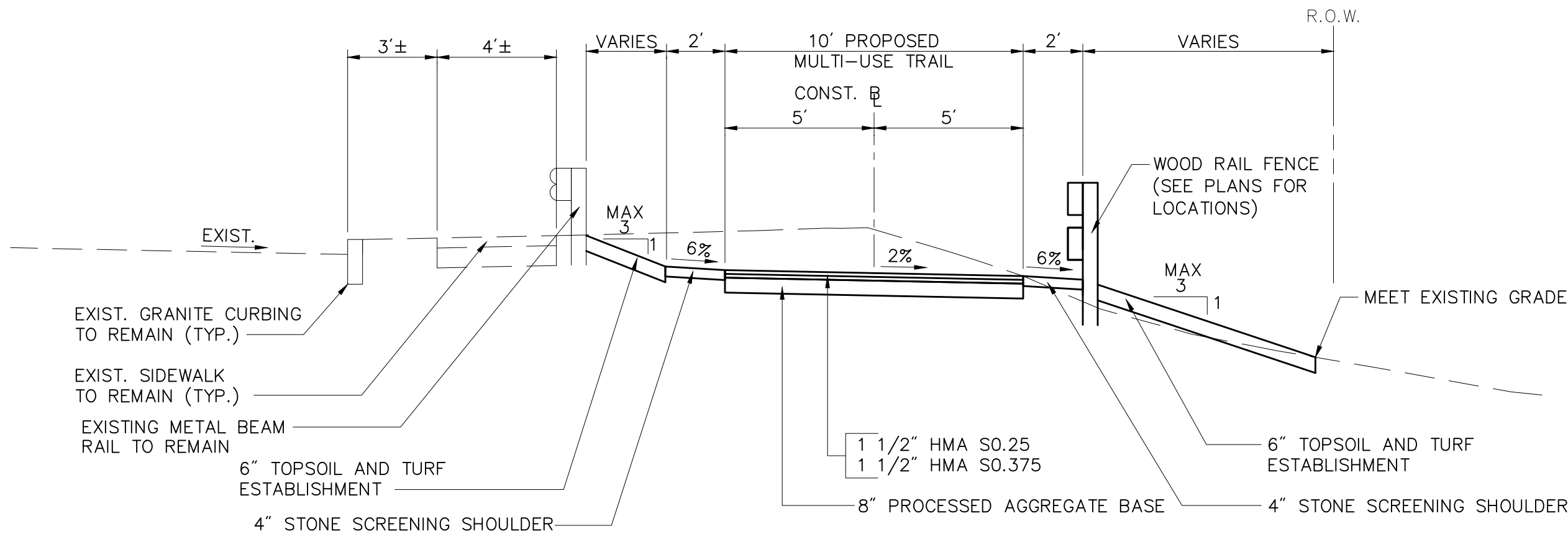
PROJECT NO.:
42-300/301
DRAWING NO.:
TYP-1
SHEET NO.:
07



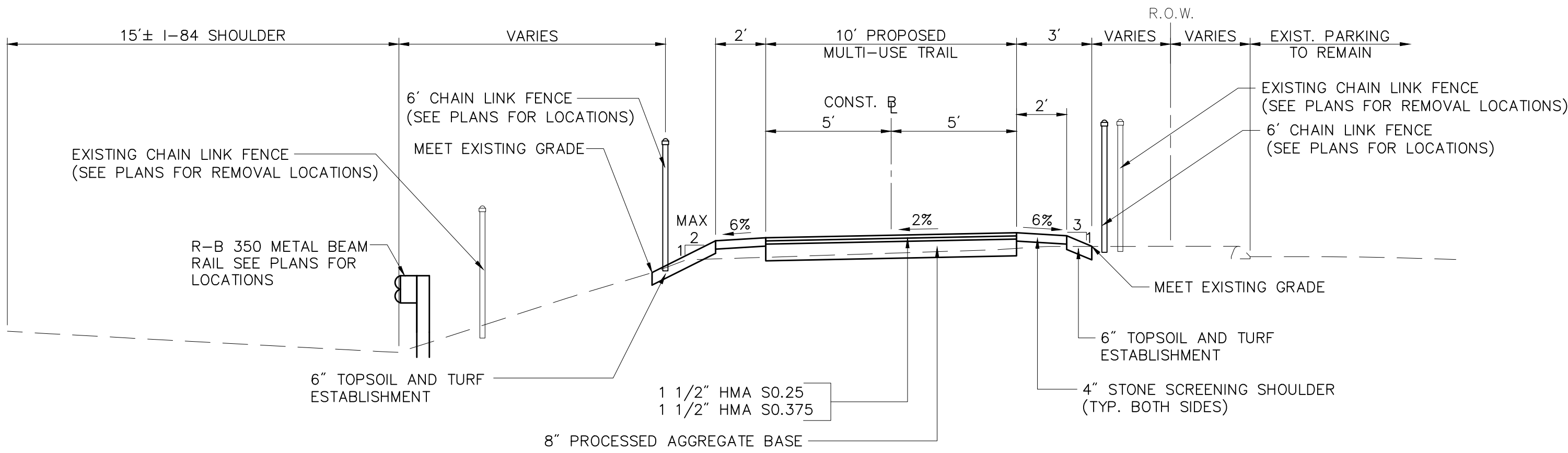
TRAIL SECTION DETAIL E (SIMMONS ROAD RE-STRIPING)
STA. 144+66 TO 153+00



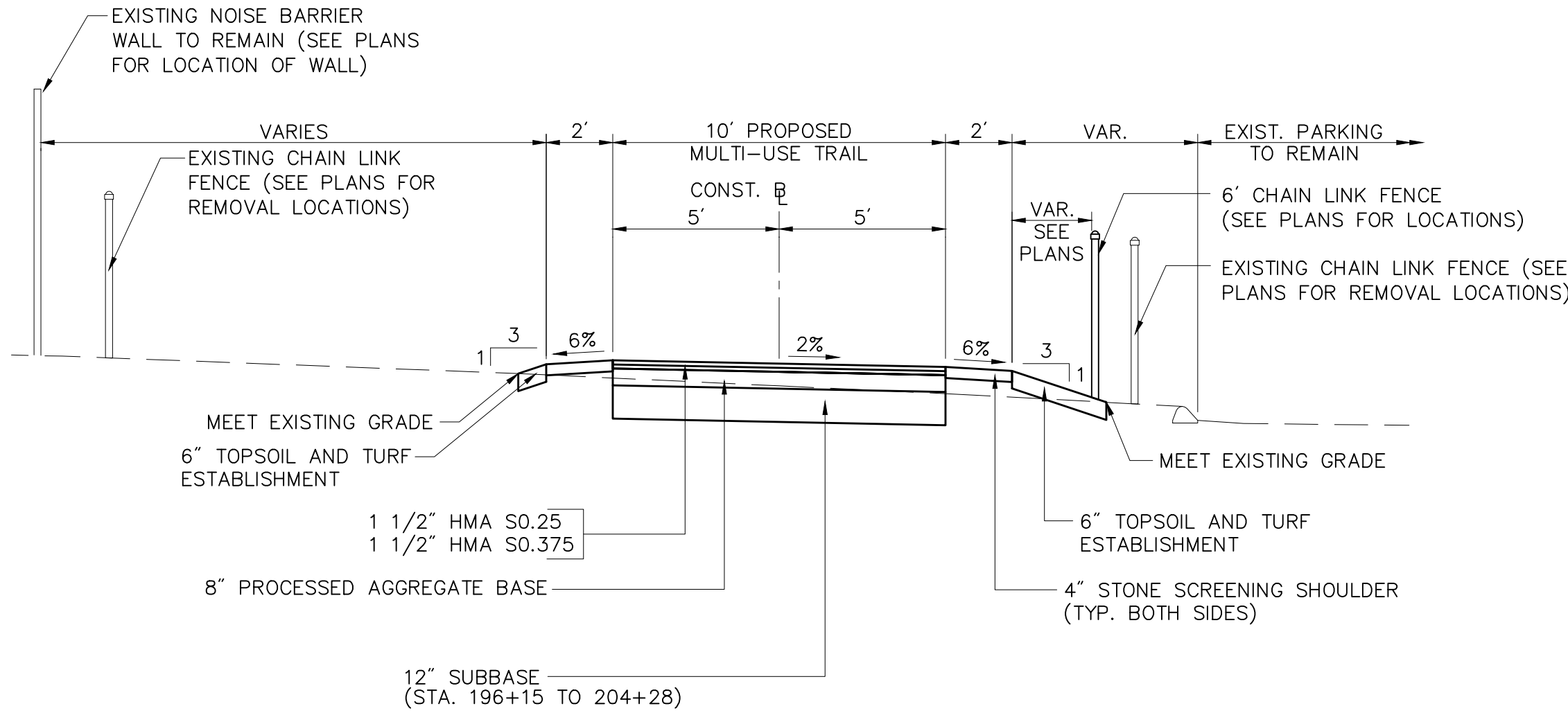
TRAIL SECTION DETAIL F
STA. 153+62 TO 155+88



TRAIL SECTION DETAIL G
STA. 156+37 TO 158+25



TRAIL SECTION DETAIL H
STA. 172+50 TO 189+50
STA. 203+25 TO 204+28
STA. 207+06 TO 209+24

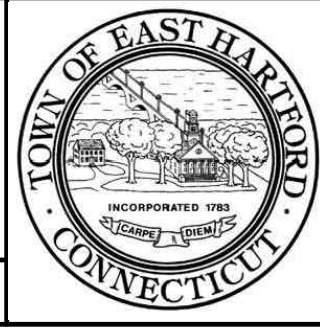


TRAIL SECTION DETAIL I
STA. 158+25 TO 172+50
STA. 189+50 TO 194+03
STA. 196+15 TO 203+25

REV.	DATE	DESCRIPTION	SHEET NO.

NOT TO SCALE	DESIGNER: EN
	DRAFTER: EN
	CHECKED BY: CF
	APPROVED BY: SON

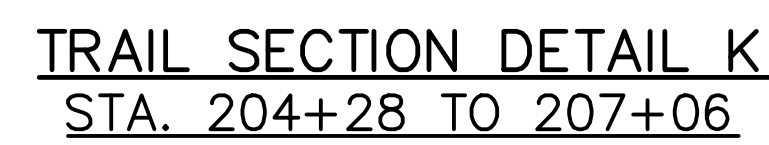
Vanasse Hangen Brustlin, Inc. Transportation Land Development Environmental Services
PLANS ISSUED: ISSUED FOR CONSTRUCTION
DATE: 6/1/2015

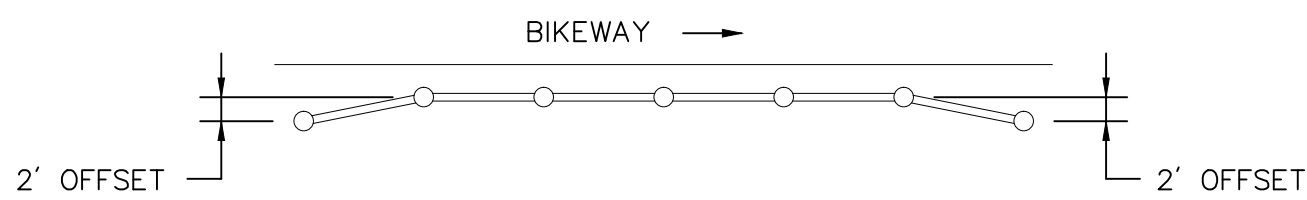
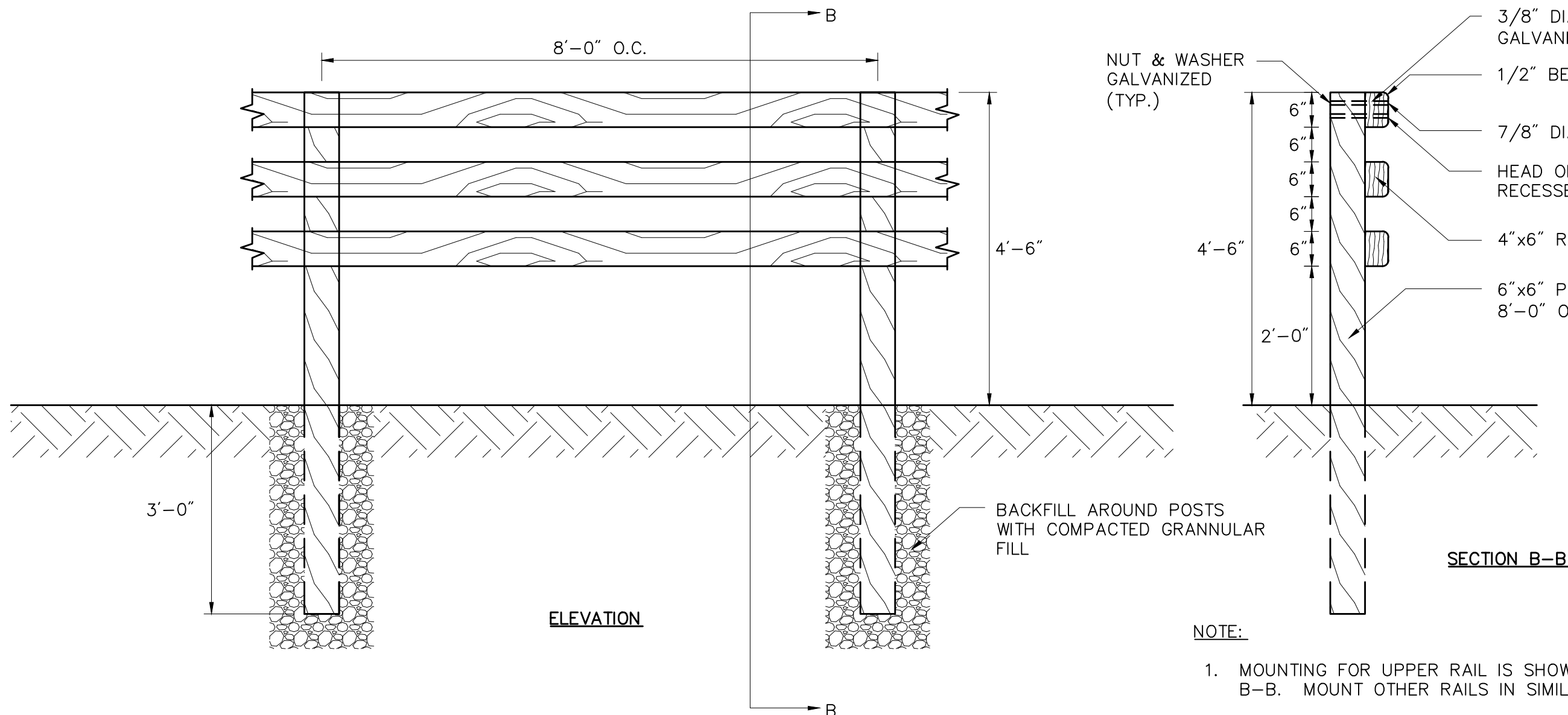


PROJECT TITLE: EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.
CADD: TYP-00000-V4101900.dwg

TOWN: EAST HARTFORD, CONNECTICUT
DRAWING TITLE: TYPICAL TRAIL SECTIONS

PROJECT NO.: 42-300/301
DRAWING NO.: TYP-2
SHEET NO.: 08

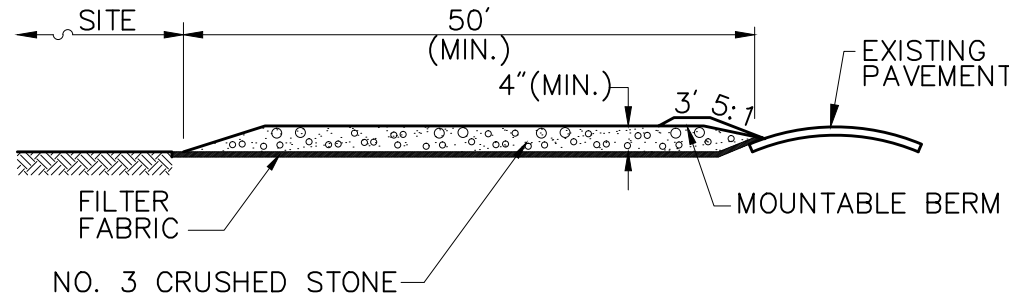
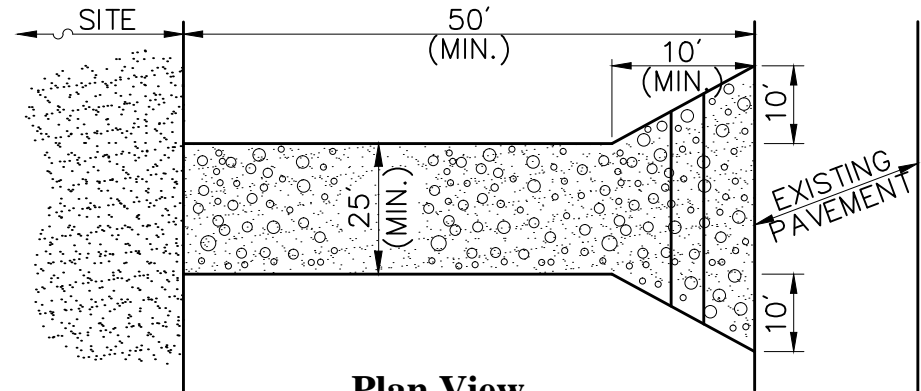
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WOOD RAIL FENCE
NOT TO SCALE

NOTE:

1. MOUNTING FOR UPPER RAIL IS SHOWN ON SECTION B-B. MOUNT OTHER RAILS IN SIMILAR FASHION.
2. ALL TIMBER USED TO BE PRESSURE TREATED WOOD.
3. FIRST AND LAST SECTION OF A LINE OF WOOD RAIL FENCE SHALL BEGIN/END WITH A 2' OFFSET TAPER.
4. RAIL SHALL BE CONTINUOUS OVER 3 POSTS (2 SPANS).
5. CONTRACTOR SHALL STAGGER RAIL SPLICES WHERE FENCE IS PARALLEL TO TRAIL.



Cross-section

Notes:

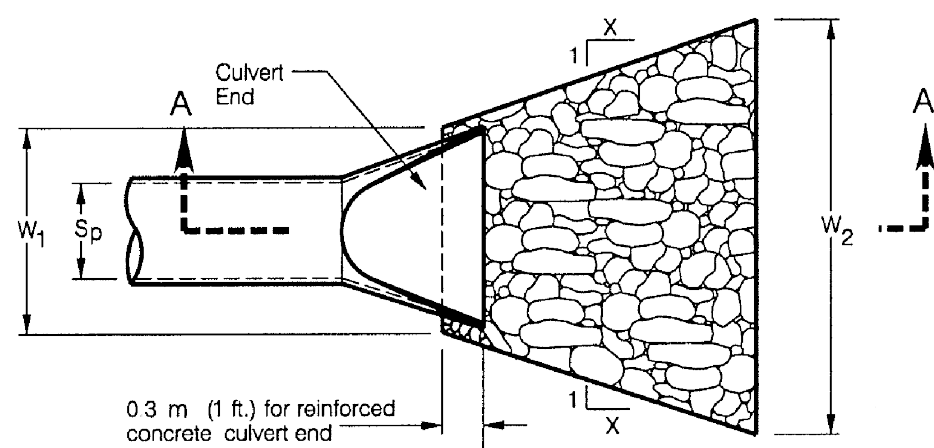
1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit

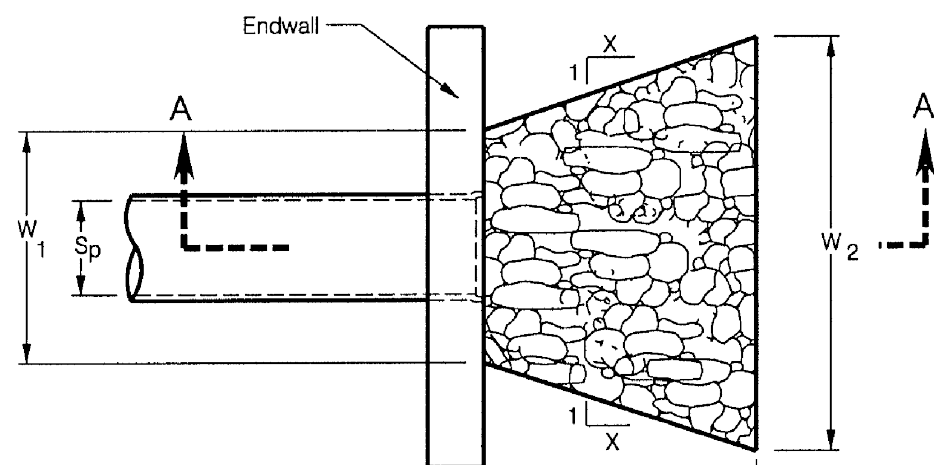
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Source: VHB

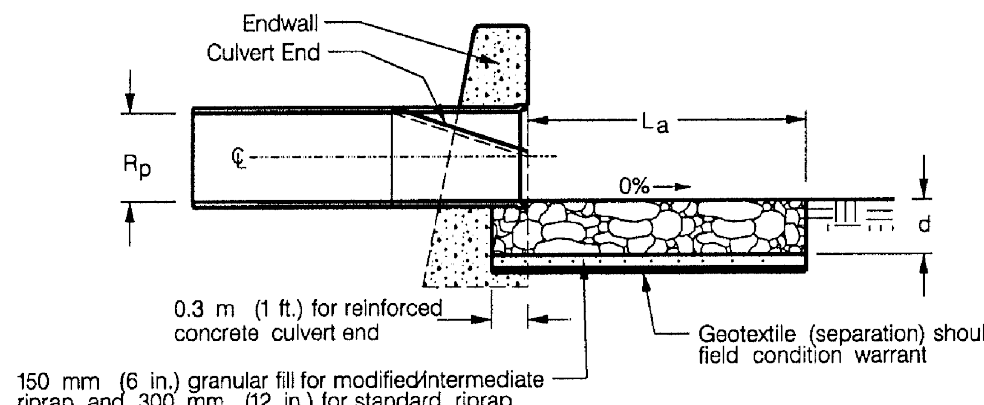
6/08
REV LD_682



CULVERT END PLAN VIEW



ENDWALL PLAN VIEW



SECTION A-A
CULVERT END AND ENDWALL

NOTE:

1. THE CONTRACTOR SHALL USE THE MODIFIED RIPRAP.
2. $L_a=10'$ FOR 12" DIA. PIPE

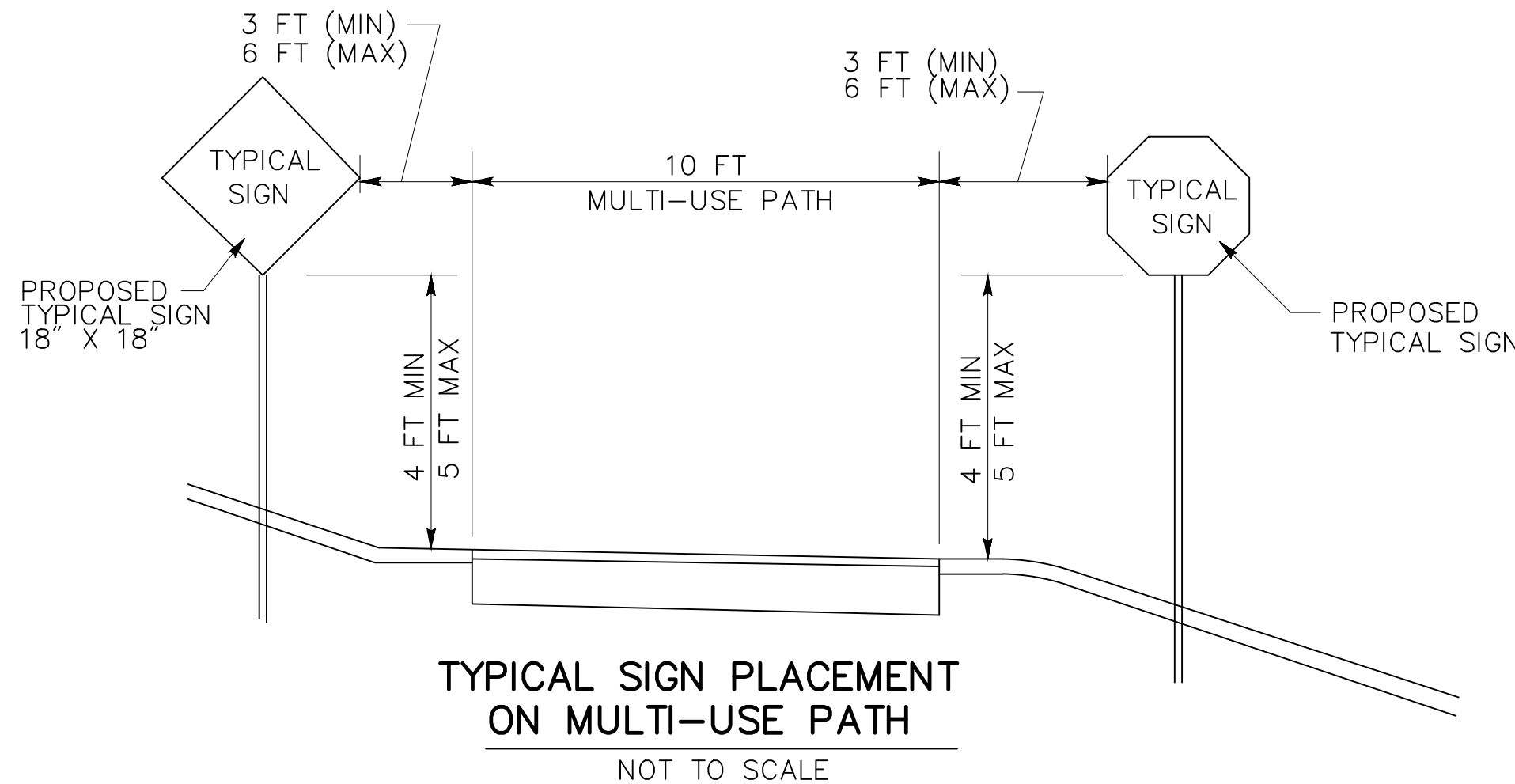
LEGEND

$S_p = \begin{cases} \text{Max. inside pipe span (non-circular sections)} \\ \text{Inside pipe diameter (circular sections)} \end{cases}$
 $R_p = \begin{cases} \text{Max. inside pipe rise (non-circular sections)} \\ \text{Inside pipe diameter (circular sections)} \end{cases}$
 $L_a = \text{Length of riprap apron measured from the end of culvert end section or face of endwall}$
 $d = \begin{cases} 300 \text{ mm (12 in.) Modified Riprap} \\ 450 \text{ mm (18 in.) Intermediate Riprap} \\ 900 \text{ mm (36 in.) Standard Riprap} \end{cases}$

	X	W ₁	W ₂
Type A Riprap Apron	3	$3S_p$	$3S_p+0.7 L_a$
Type B Riprap Apron	5	$3S_p$	$3S_p+0.4 L_a$

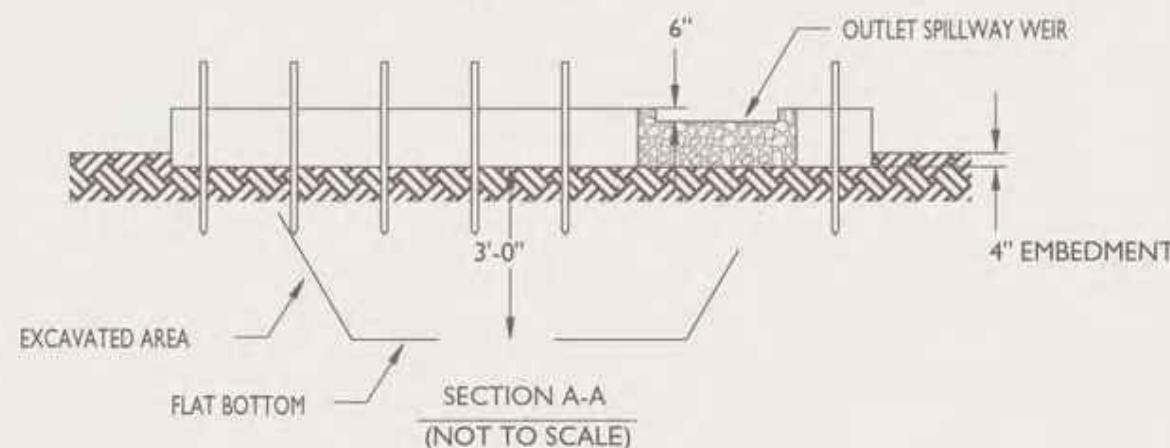
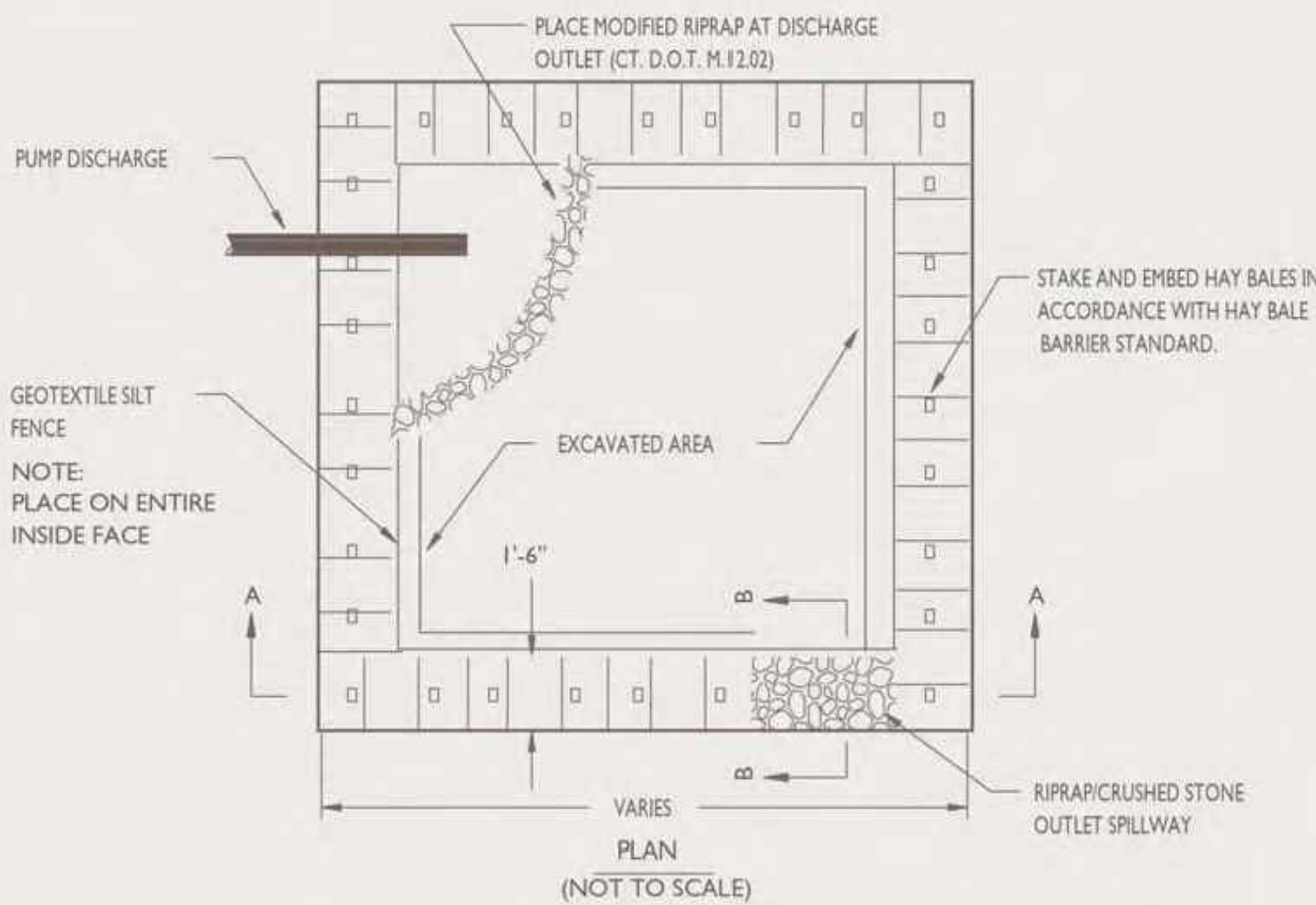
TYPE A RIPRAP APRON

NOT TO SCALE

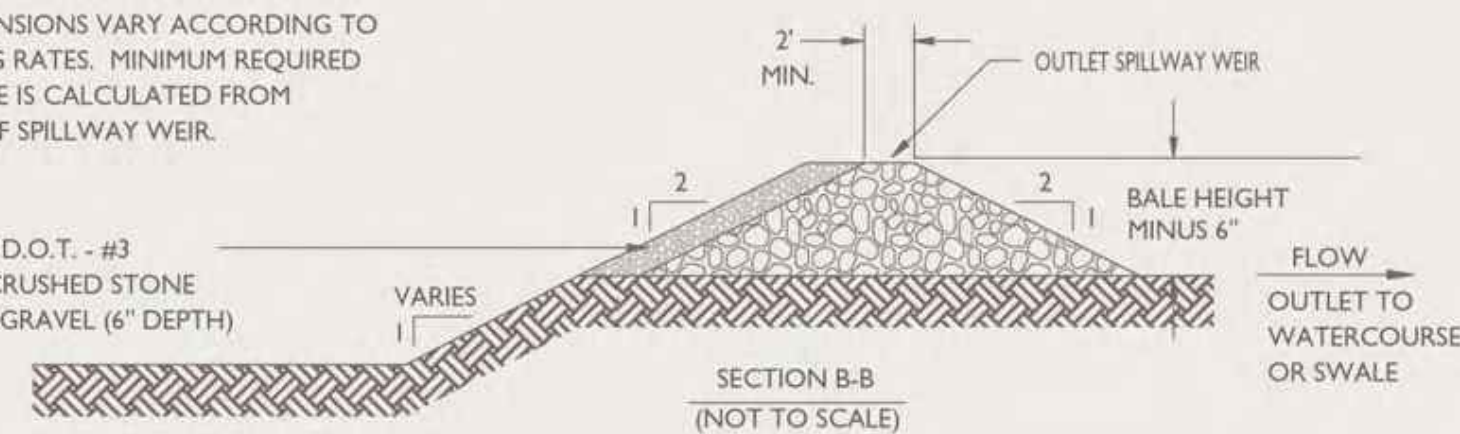


TYPICAL SIGN PLACEMENT
ON MULTI-USE PATH

NOT TO SCALE



NOTE: DIMENSIONS VARY ACCORDING TO PUMPING RATES. MINIMUM REQUIRED STORAGE IS CALCULATED FROM CREST OF SPILLWAY WEIR.



TYPE II DEWATERING SETTLING BASIN

NOT TO SCALE

REV.	DATE	DESCRIPTION	SHEET NO.
		REVISIONS	

DESIGNER: EN

DRAFTER: EN

CHECKED BY: CF

APPROVED BY: SON

Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services

PLANS ISSUED: ISSUED FOR CONSTRUCTION

DATE: 6/1/2015



PROJECT TITLE:

EAST HARTFORD MULTI-USE TRAIL
CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.
SILVER LANE/SIMMONS RD. TO FORBES ST.

CADD MDS-00000-V4101900.dwg

TOWN:

EAST HARTFORD, CONNECTICUT

DRAWING TITLE:

MISCELLANEOUS
DETAILS

PROJECT NO.:

42-300/301

DRAWING NO.:

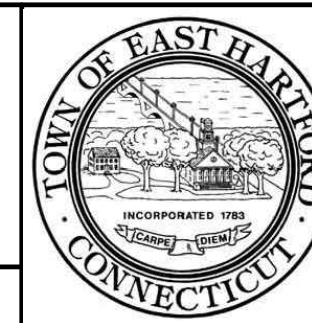
MD-3

SHEET NO.:

12

DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

PLANS ISSUED: ISSUED FOR CONSTRUCTION



PROJECT TITLE:

EAST HARTFORD MULTI-USE TRAIL
CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.
SILVER LANE/SIMMONS RD. TO FORBES ST.

CADD MDS-00000-V4101900.dwg

TOWN:		EAST HARTFORD, CONNECTICUT	
DRAWING TITLE:		MISCELLANEOUS DETAILS	

PROJECT NO.: 42-300/301
DRAWING NO.: MD-5
SHEET NO.: 14

- 1.) DURING ASSEMBLY PROCEDURE;
DO NOT COMPLETELY TIGHTEN HARDWARE
- 2.) THE ACTUAL PARTS WILL NOT BE NUMBERED:
NUMBERS ONLY APPLY TO DRAWING.



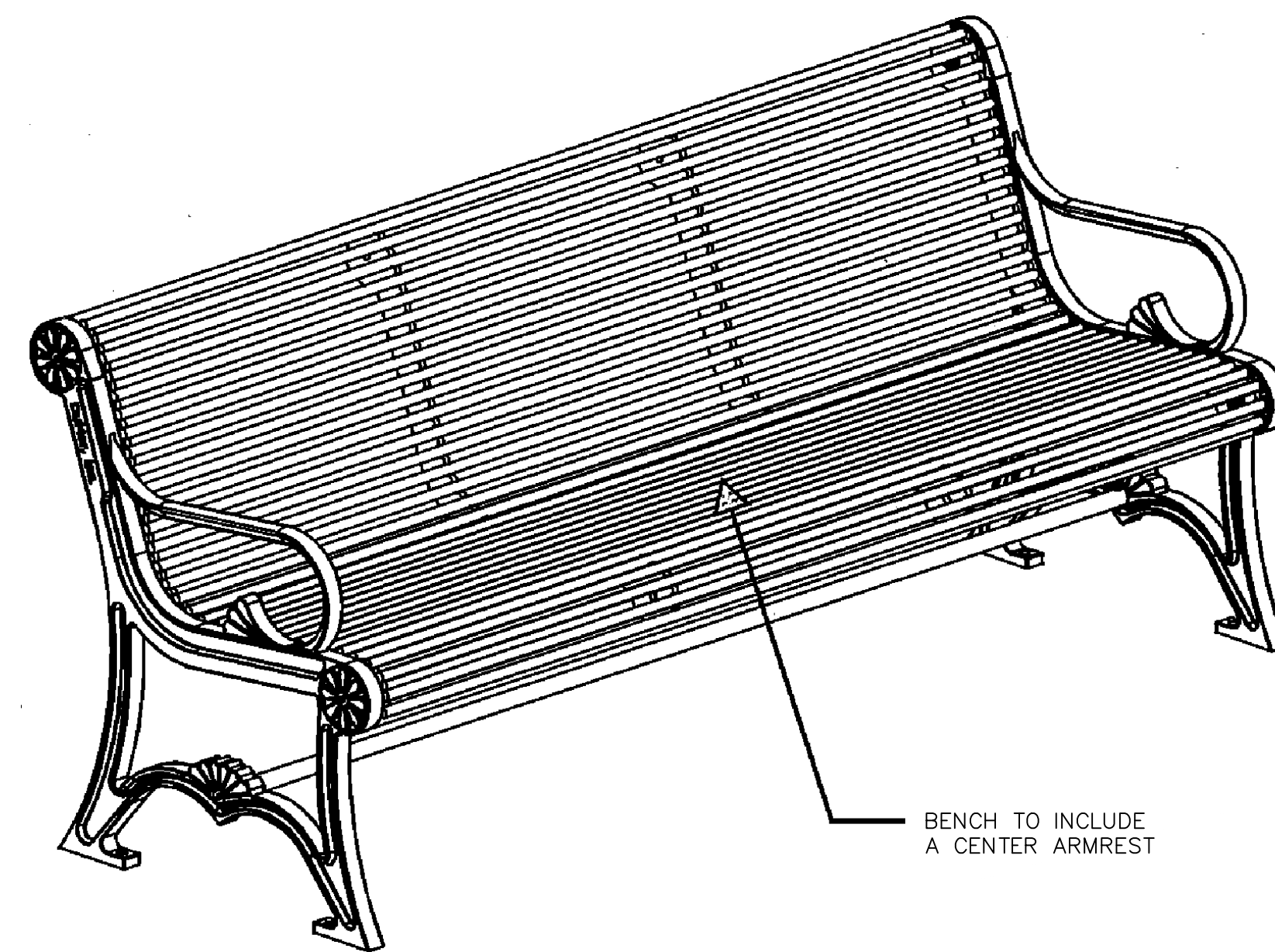
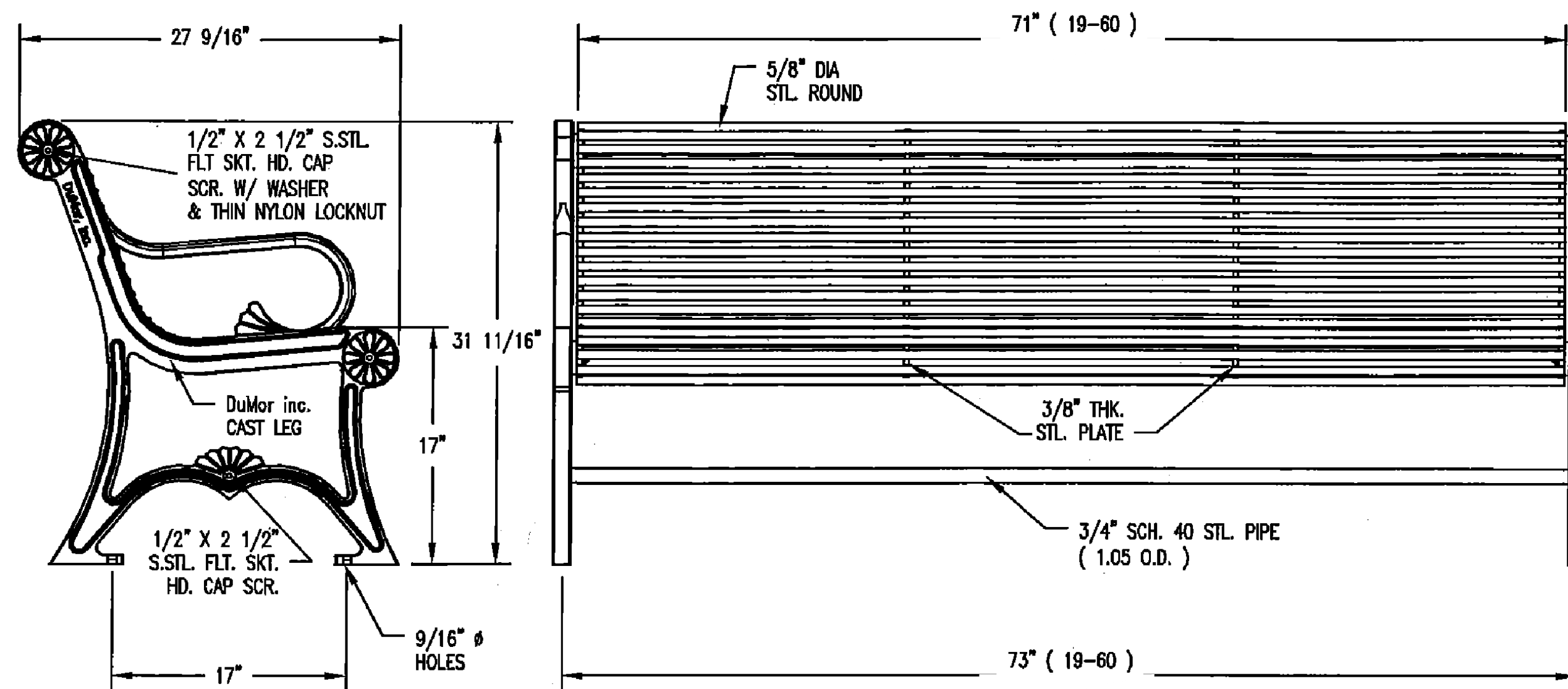
USE 1 - PC. 6' SEAT ASSEMBLY (1)
2 - PCS. CAST IRON BENCH SUPPORTS (2)
4 - PCS. 1/2" X 2 1/2" FLT. SKT. HD. CAP SCR. (4)
4 - PCS. 1/2" SS THIN NYLON LOCKNUT (5)
4 - PCS. 1/2" SS FLAT WASHER (6)
ATTACH CAST IRON BENCH SUPPORT (2) TO 6' SEAT
ASSEMBLY (1) USING HARDWARE (4, 5, & 6).
TIGHTEN TO SNUG FIT.

USE 1 - PC. 71 3/4" PIPE BRACE (3)
2 - PCS. 1/2" X 2 1/2" FLT. SKT. HD. CAP SCR (4)
ATTACH 71 3/4" PIPE BRACE (3) TO STEP 1 ASSEMBLY
USING HARDWARE (4). TIGHTEN SNUG FIT.

UPON COMPLETION OF BENCH ASSEMBLY SQUARE ALL COMPONENTS THEN TIGHTEN ALL HARDWARE.

MOUNT AND ANCHOR AS SPECIFIED.

ITEM	QTY	PART NO	DESCRIPTION
1	1	0-19-60-01	6" STL SEAT SECTION
2	2	0-57-00-02	CAST IRON BENCH SUPPORT
3	1	0-57-60-04	71 3/4" PIPE BRACE
4	6	1-12-065	1/2" X 2 1/2" FLT SKT HD CAP SCR
5	4	1-20-018	1/2" SS THIN NYLON LOCKNUT
6	4	1-22-015	1/2" SS FLAT WASHER

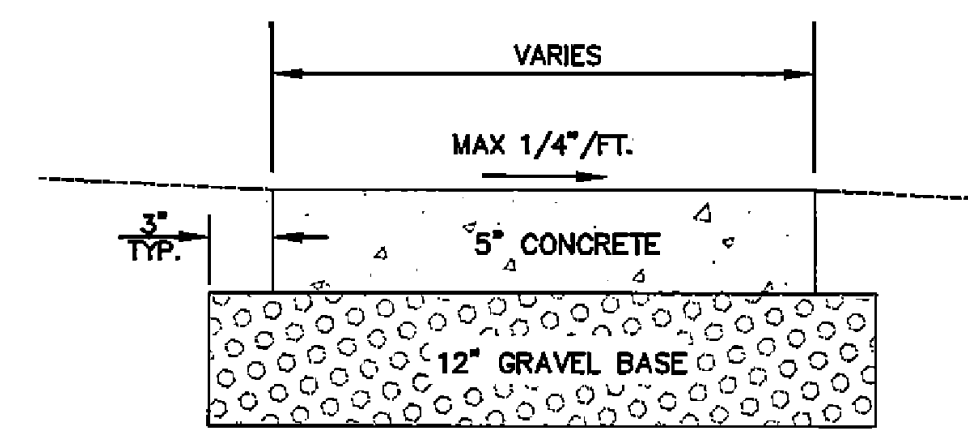


- BENCH TO INCLUDE
A CENTER ARMREST

NOTE: BENCH CENTERED ON PA

PAD LAYOUT – BENCH

NOT TO SCALE



CONCRETE PAD SECTION

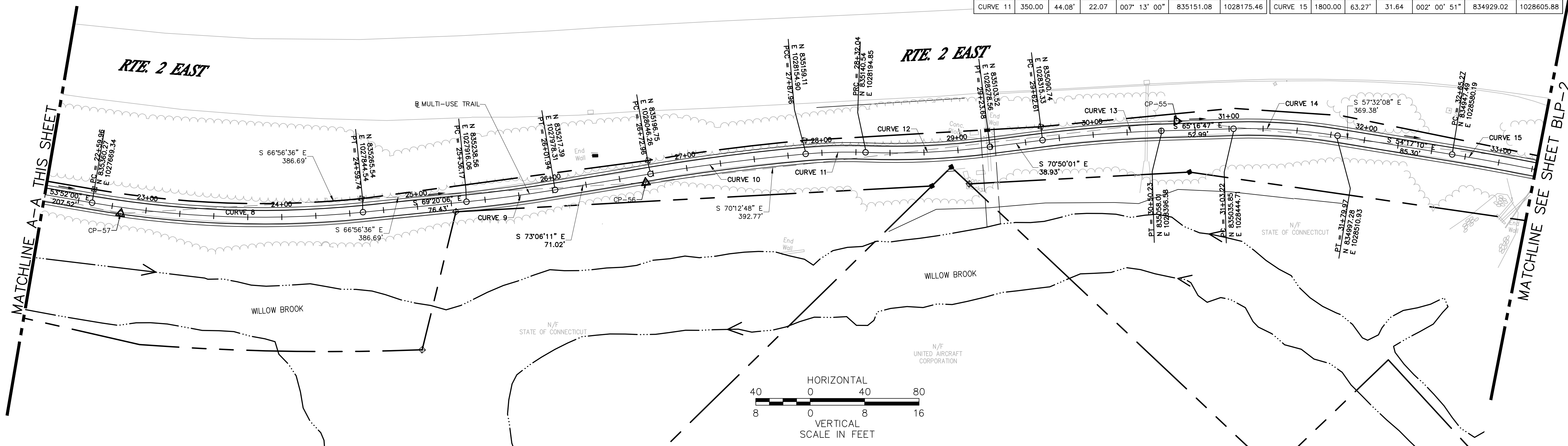
NOT TO SCALE

1. CONCRETE TO MEET EAST HARTFORD SIDEWALK MIX DESIGN (SEE SPECIFICATIONS).
2. GRAVEL BASE SHALL BE INSTALLED WHERE EXISTING MATERIAL IS UNSUITABLE.
3. JOINT PATTERN TO BE AS SHOWN ON DRAWINGS OR DIRECTED IN THE FIELD.
4. TOOLED JOINTS SHALL BE $\frac{1}{4}$ THE THICKNESS OF THE CONCRETE PAD.
5. ASPHALTIC EXPANSION JOINTS ($\frac{1}{2}$ " THICK) SHALL BE INSTALLED ADJACENT TO EXISTING CONCRETE AND WHERE SHOWN OR DIRECTED.

	BASELINE CURVE TABLE					
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 1	139.00	132.12'	71.53	05° 27' 30"	836027.42	1026789.42
CURVE 2	200.00	56.73'	28.56	01° 15' 10"	836015.60	1026918.53
CURVE 3	120.00	51.52'	26.16	02° 34' 56"	835977.92	1027014.26
CURVE 4	500.00	18.40'	9.20	00° 02' 32"	835875.14	1027113.22
CURVE 5	1000.00	131.21'	65.70	00° 31' 05"	835761.12	1027231.40
CURVE 6	400.00	53.58'	26.83	00° 40' 30"	835648.86	1027320.72
CURVE 7	600.00	80.47'	40.30	00° 41' 04"	835506.40	1027469.19

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 8	740.00'	199.78'	100.50	015° 28' 07"	835301.00	1027750.51
CURVE 9	1000.00	65.76'	32.89	003° 46' 05"	835226.96	1027946.84
CURVE 10	1488.00'	115.00'	57.53	004° 26' 41"	835180.03	1028101.31
CURVE 11	350.00'	44.08'	22.07	007° 13' 00"	835151.08	1028175.46

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 12	560.00	91.63'	45.92	009° 22' 31"	835118.60	1028235.19
CURVE 13	904.00	87.63'	43.85	005° 33' 14"	835076.35	1028356.75
CURVE 14	400.00	76.75'	38.49	010° 59' 37"	835019.75	1028479.68
CURVE 15	1800.00	63.27'	31.64	002° 00' 51"	834929.02	1028605.88



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



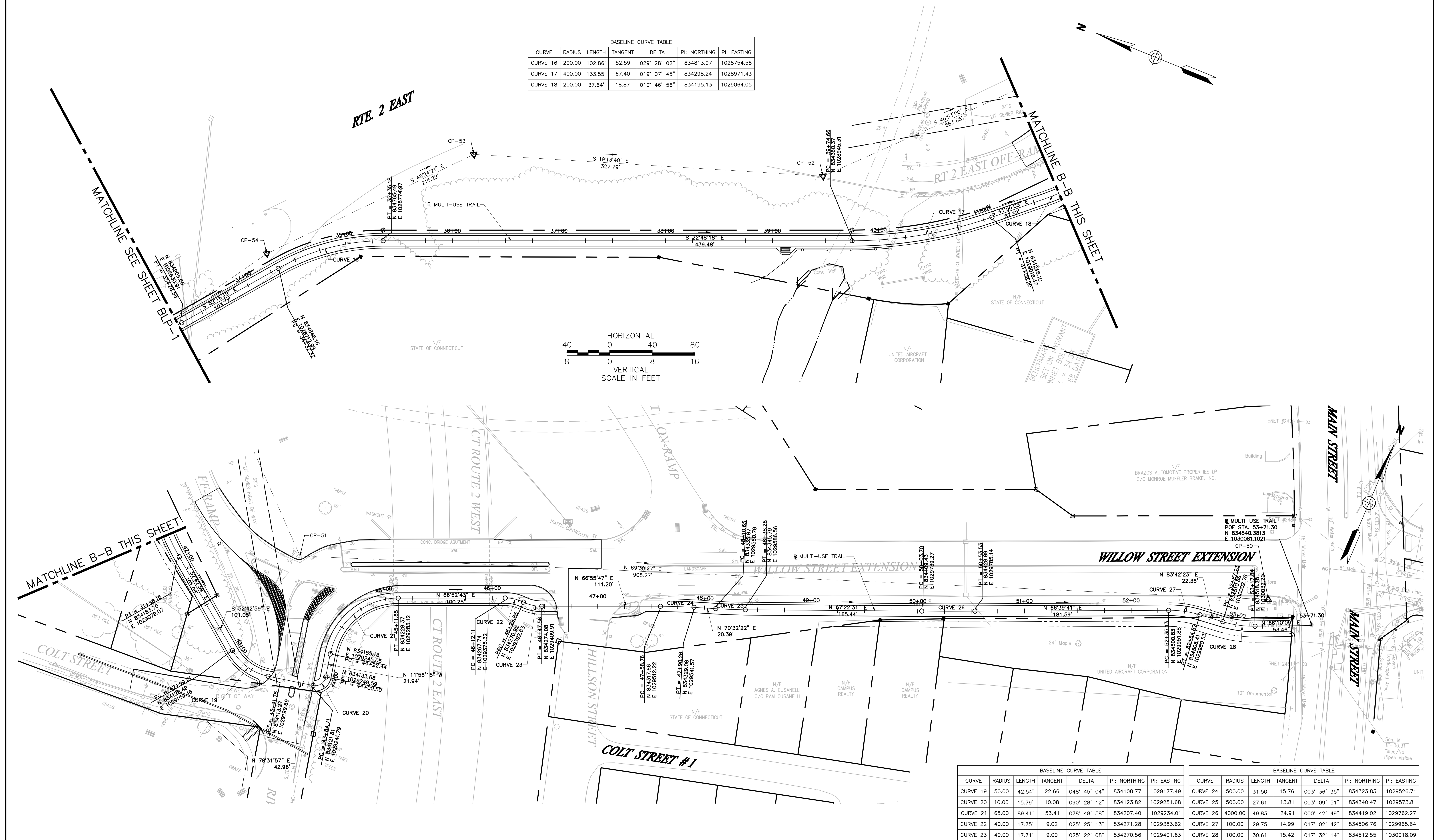
PROJECT TITLE:

EAST HARTFORD MULTI-USE TRAIL
CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.
SILVER LANE/SIMMONS RD. TO FORBES ST.

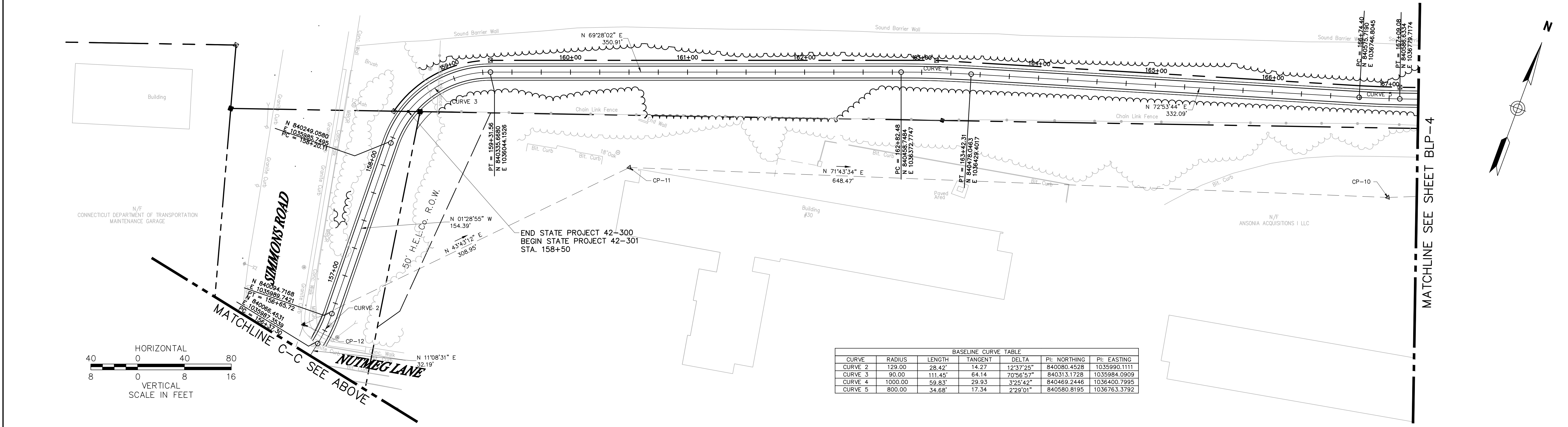
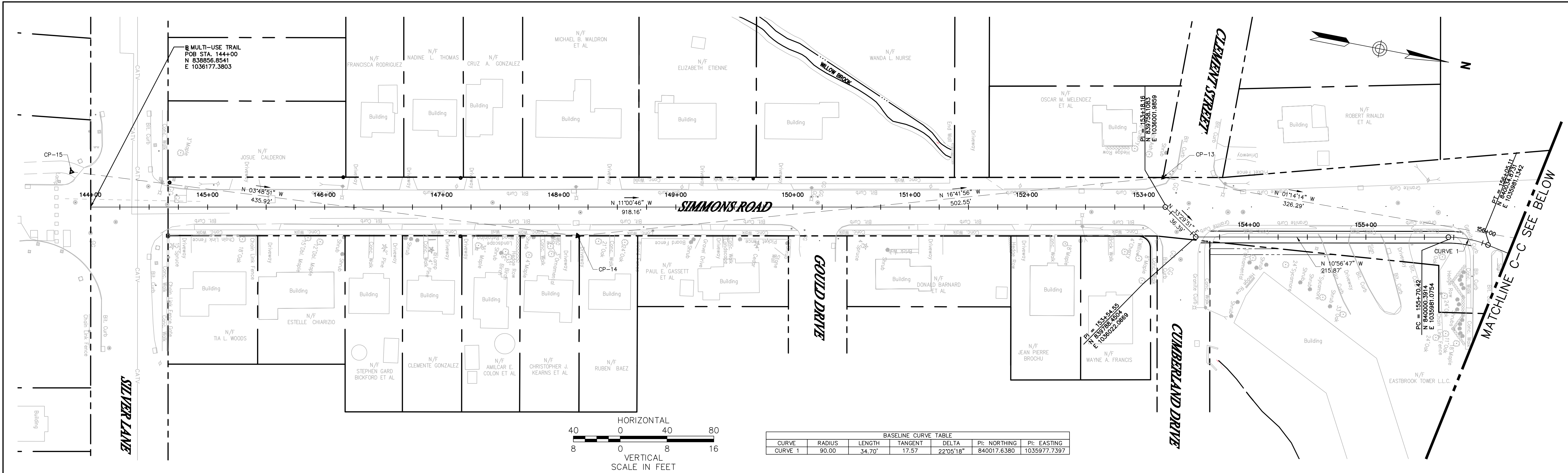
CADD BLP_4101900_SW.dwg

TOWN:	EAST HARTFORD, CONNECTICUT
DRAWING TITLE:	BASELINE LAYOUT PLANS

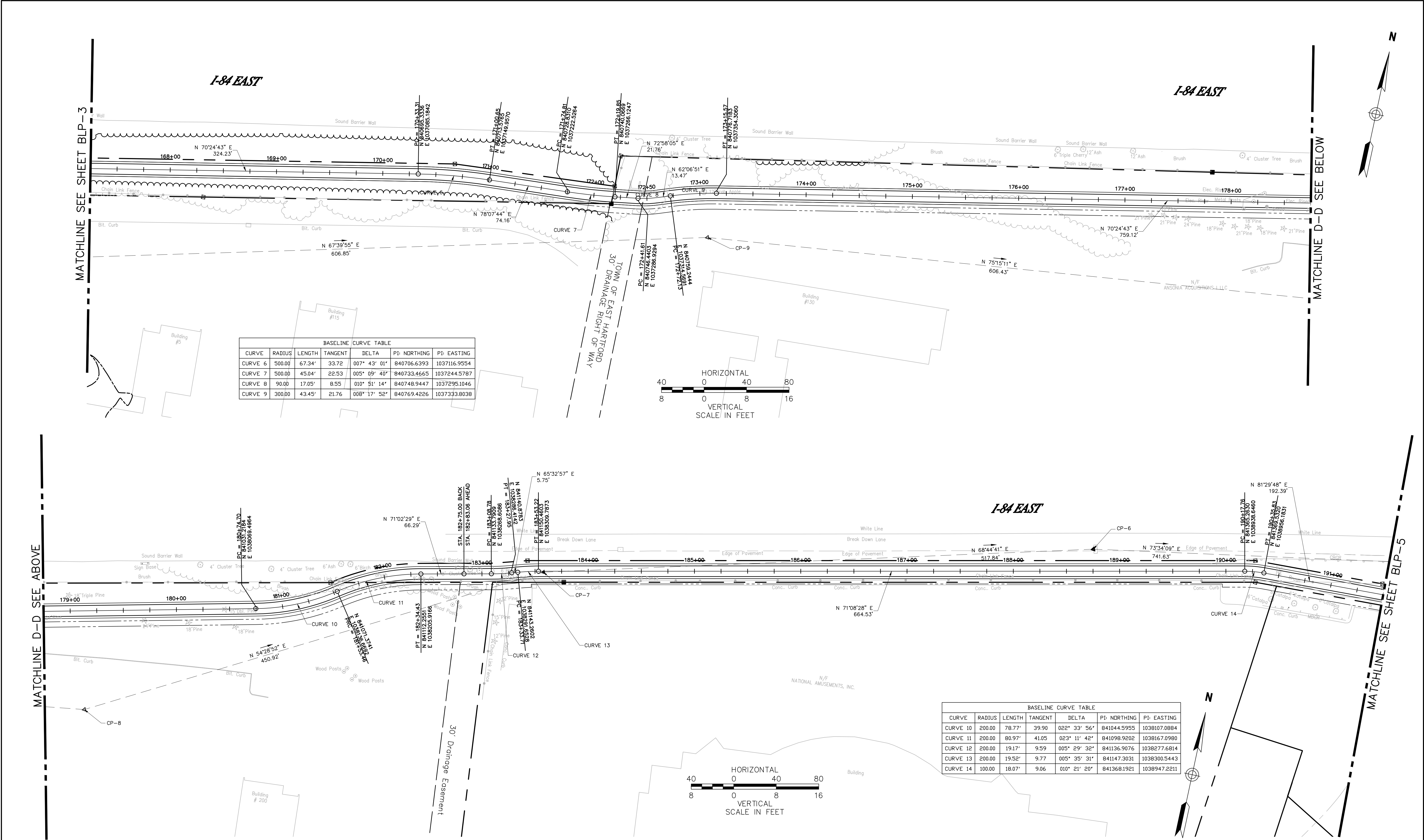
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DRAWING NO.:	BLP-1
SHEET NO.:	15



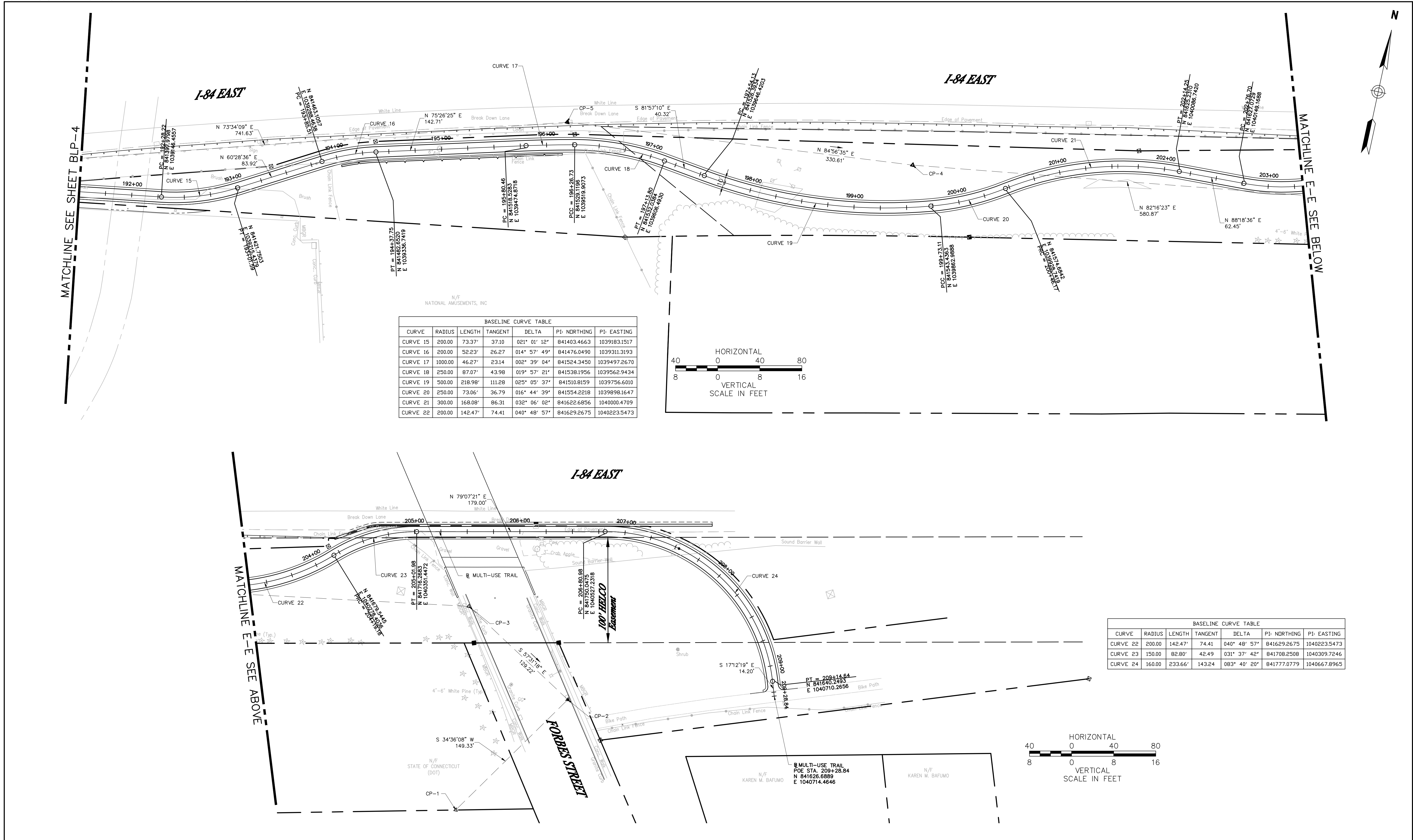
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						DRAFTER: EN		EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.	EAST HARTFORD, CONNECTICUT	42-300/301
						CHECKED BY: CF			DRAWING TITLE:	DRAWING NO.:
						APPROVED BY: SON			BASELINE LAYOUT PLANS	BLP-2
REV.	DATE	DESCRIPTION					PLANS ISSUED: ISSUED FOR CONSTRUCTION	CADD BLP_4101900_SW.dwg		SHEET NO.:
		REVISIONS					DATE: 6/1/2015			16

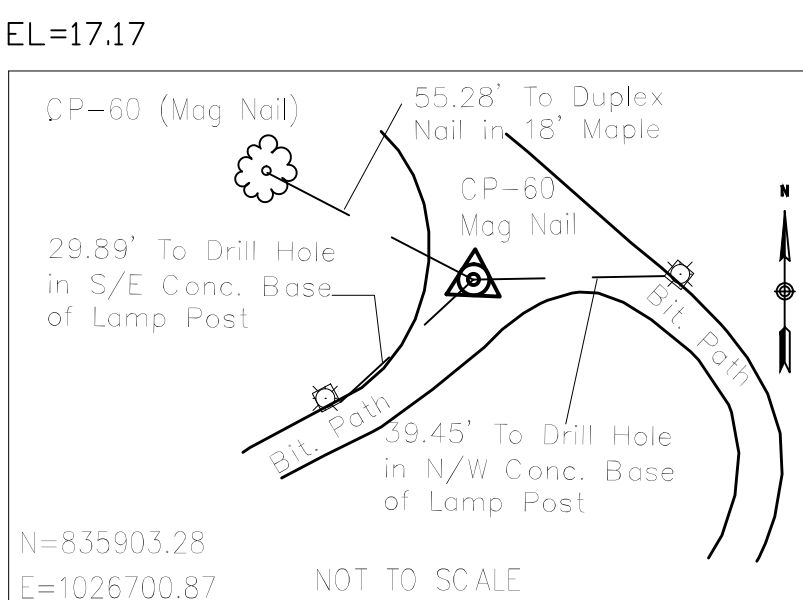
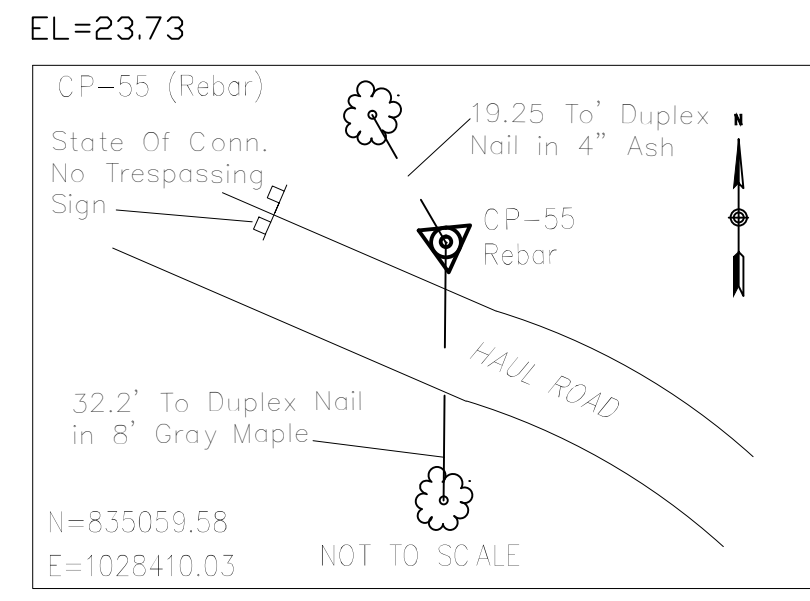


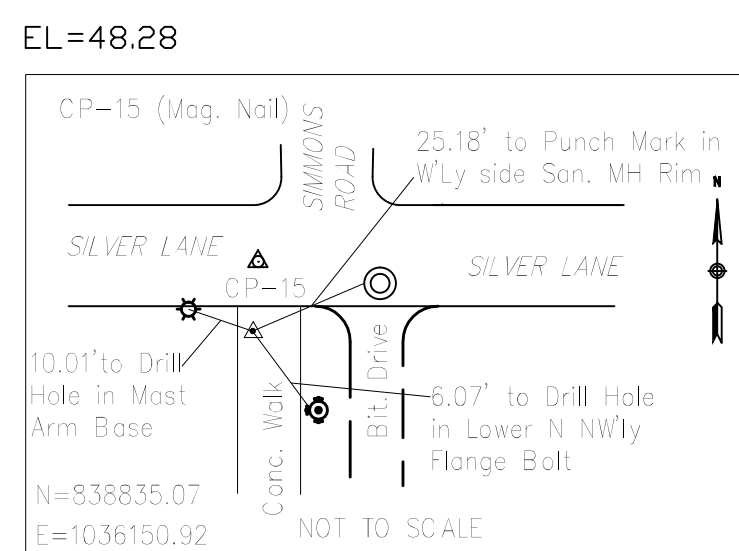
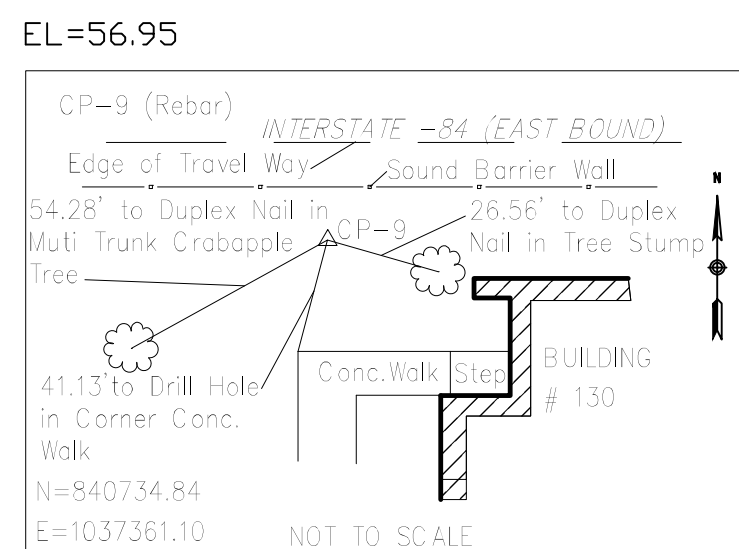
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						APPROVED BY: SON			BASELINE LAYOUT PLANS	SHEET NO.: 17	
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REVISIONS						DATE: 6/1/2015					



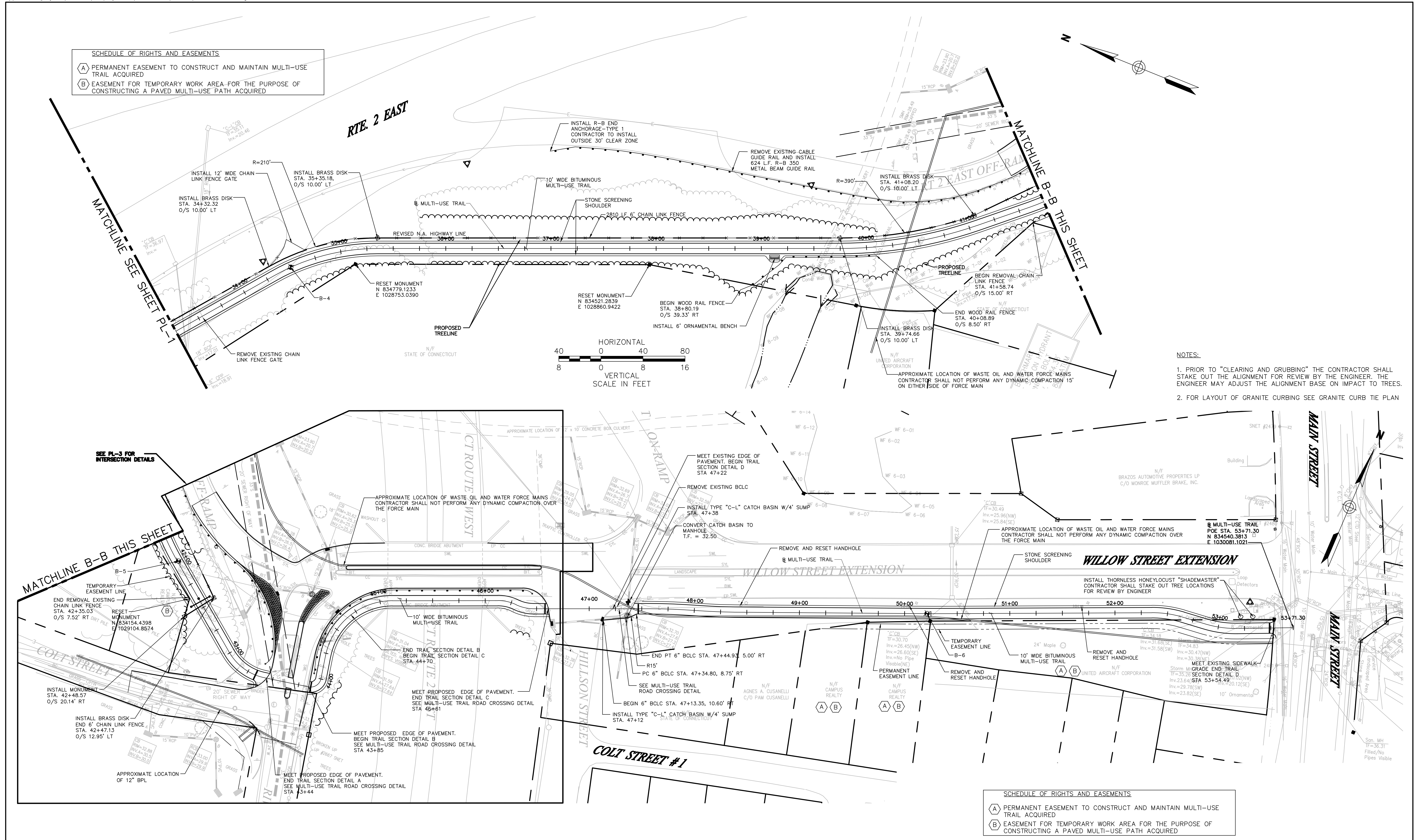
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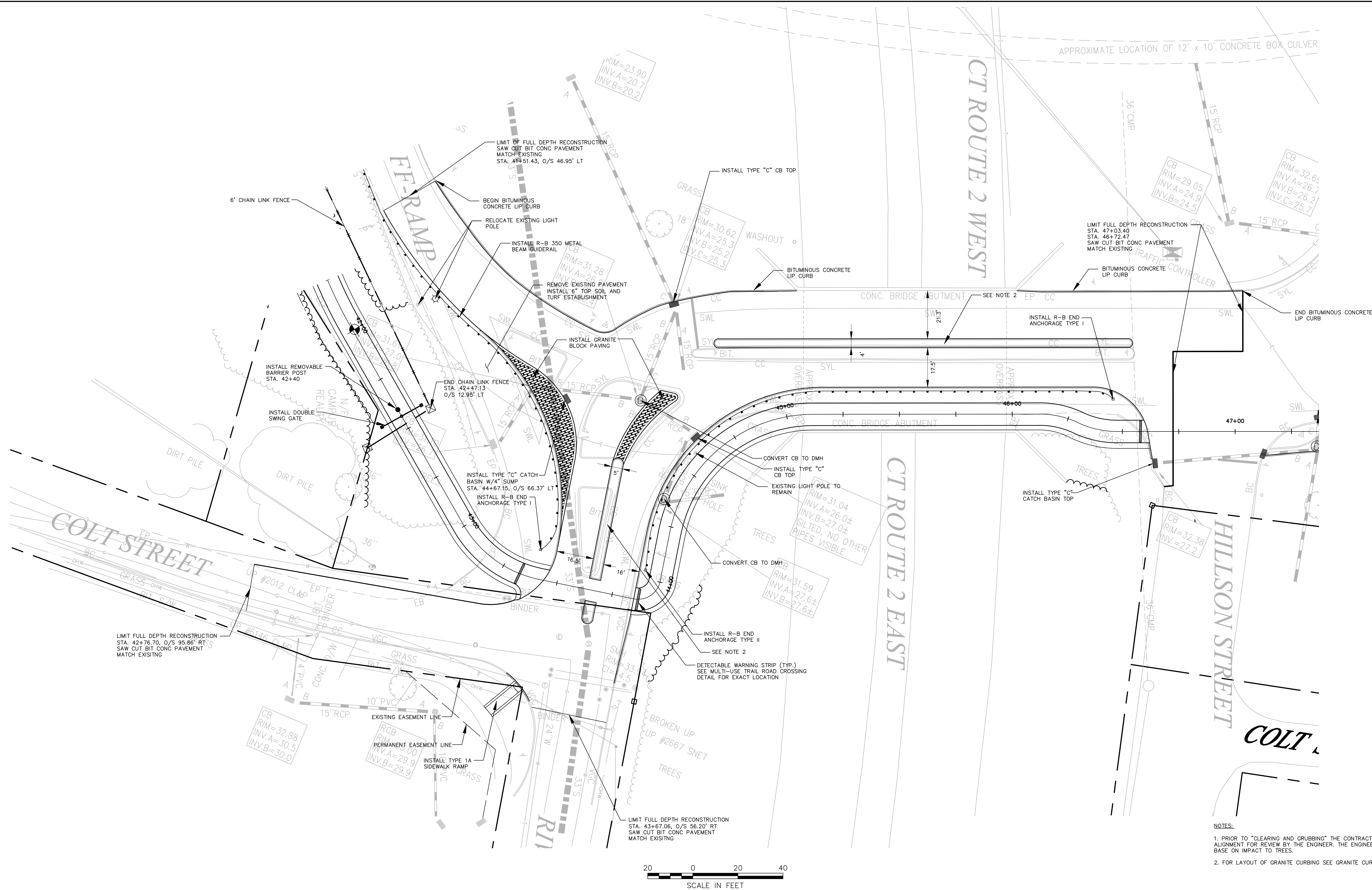


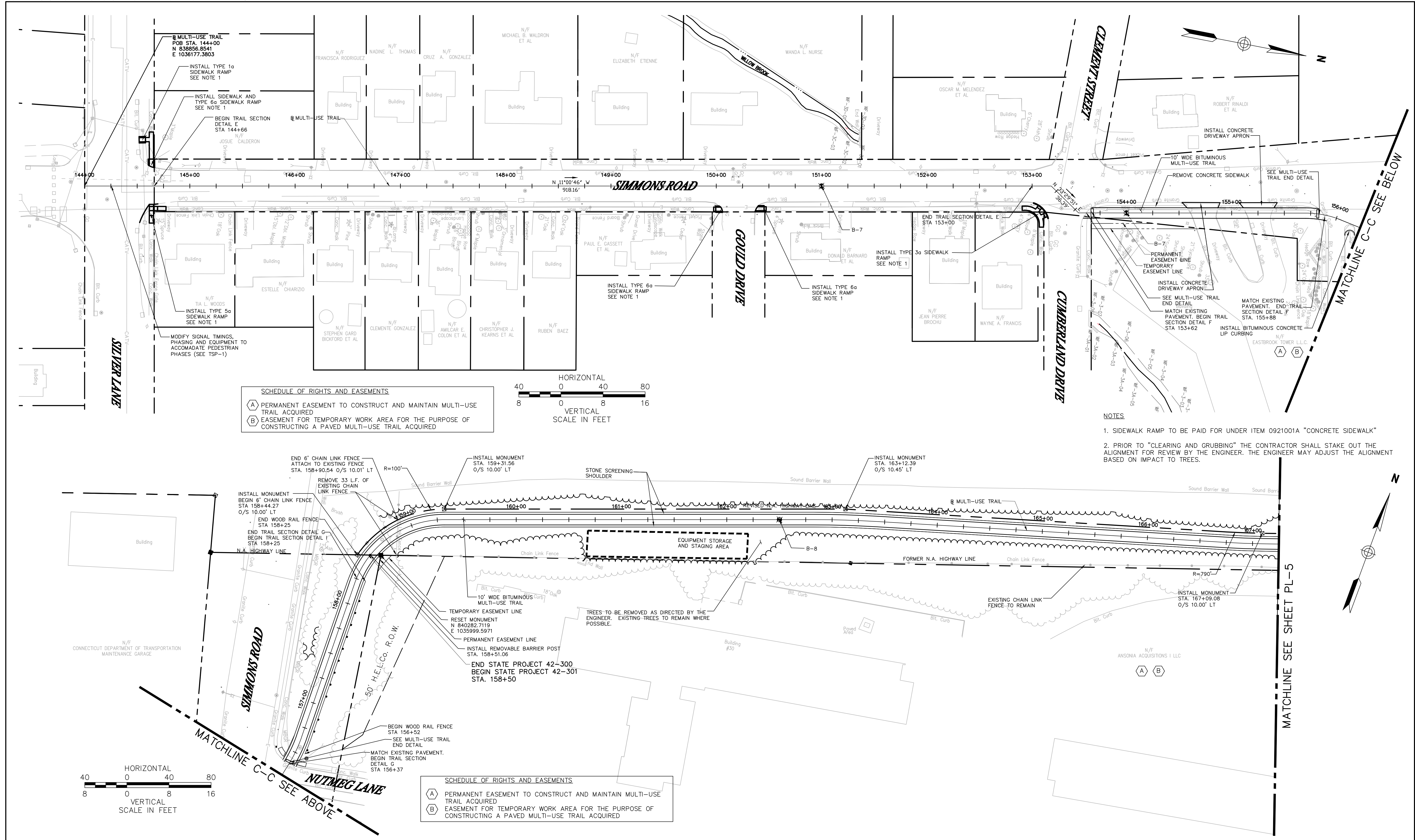






				DESIGNER: EN		PROJECT TITLE:	TOWN:	PROJECT NO.:
				DRAFTER: EN		EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.	EAST HARTFORD, CONNECTICUT	42-300/301
				CHECKED BY: CF			DRAWING TITLE:	DRAWING NO.:
REV.	DATE	DESCRIPTION	SHEET NO.	APPROVED BY: SON		PLANS ISSUED: ISSUED FOR CONSTRUCTION	LAYOUT AND CONSTRUCTION PLANS	PL-2
		REVISIONS			DATE: 6/1/2015	CADD LM_4101900_SW.dwg		SHEET NO.: 23

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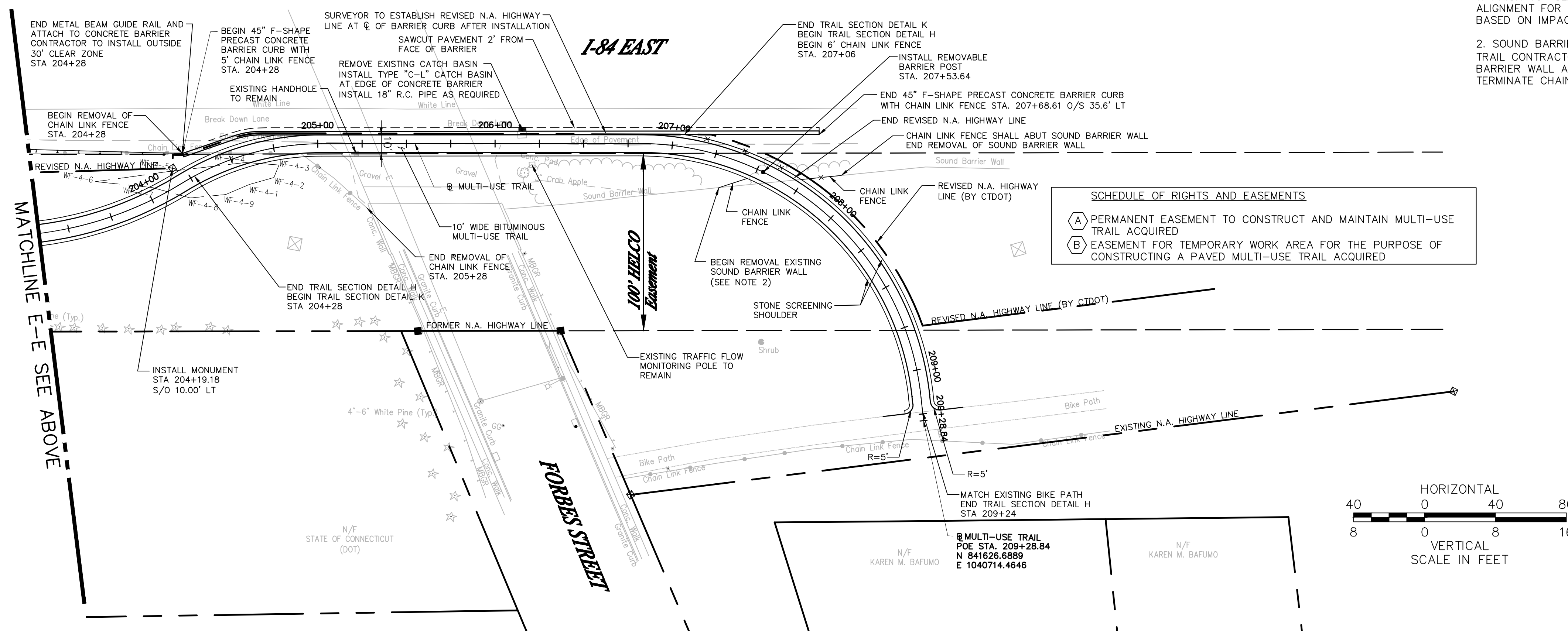


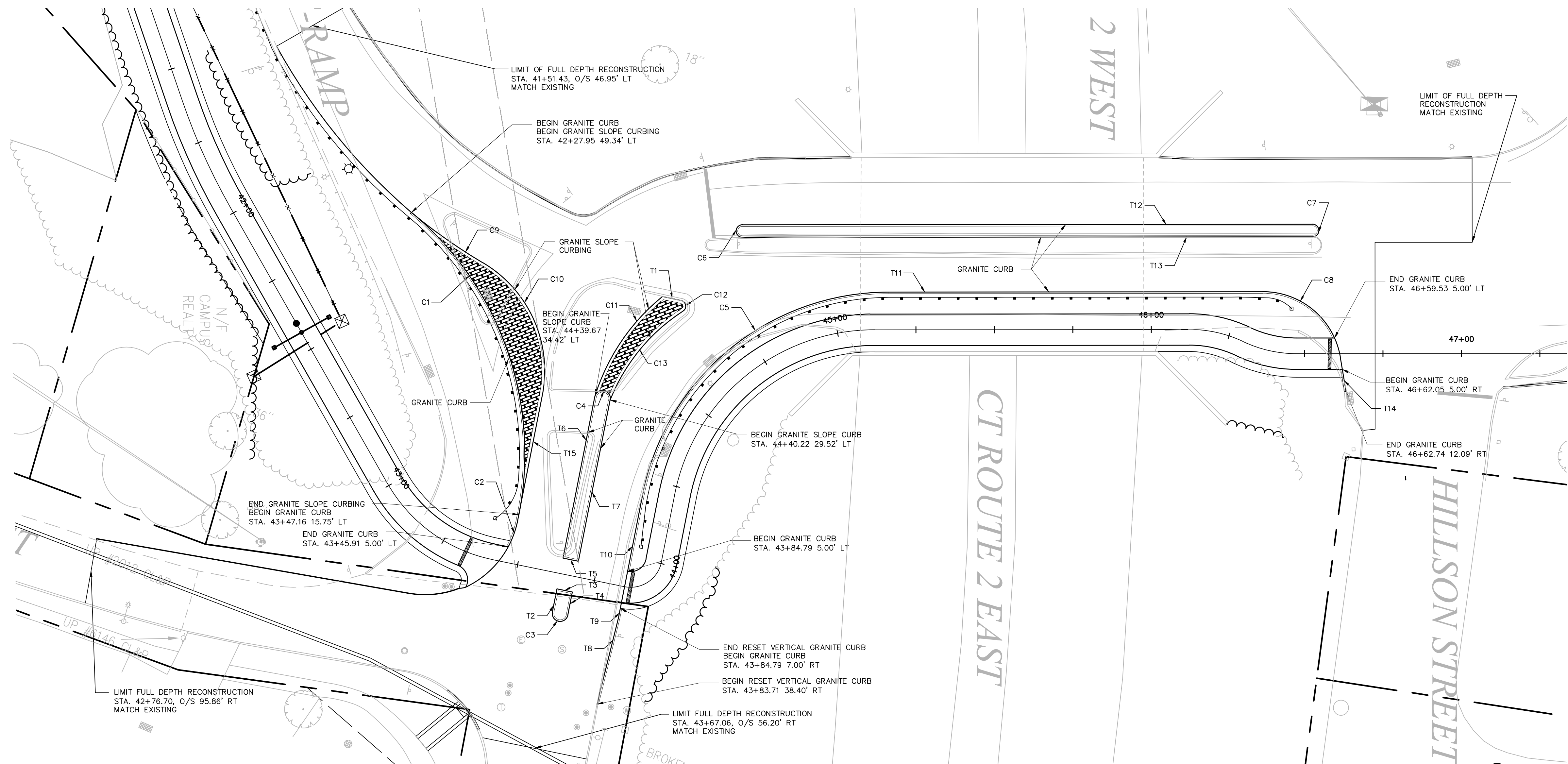
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						CHECKED BY: CF			DRAWING TITLE:	DRAWING NO.:
REV.	DATE		DESCRIPTION	SHEET NO.	APPROVED BY: SON	PLANS ISSUED: ISSUED FOR CONSTRUCTION		DATE: 6/1/2015	LAYOUT AND CONSTRUCTION PLANS	PL-4
								CADD LM_4101900_NE.dwg		SHEET NO.: 25

					DESIGNER: EN		PROJECT TITLE:	TOWN:	PROJECT NO.:	
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					CHECKED BY: CF				DRAWING NO.:	
					APPROVED BY: SON			LAYOUT AND CONSTRUCTION PLANS	PL-5	
REV.	DATE		DESCRIPTION	SHEET NO.	PLANS ISSUED: ISSUED FOR CONSTRUCTION		DATE: 6/1/2015	CADD LM_4101900_NE.dwg		SHEET NO.:
			REVISIONS							26

1. PRIOR TO "CLEARING AND GRUBBING" THE CONTRACTOR SHALL STAKE OUT THE ALIGNMENT FOR REVIEW BY THE ENGINEER. THE ENGINEER MAY ADJUST THE ALIGNMENT BASED ON IMPACT TO TREES.

2. SOUND BARRIER WALL SHALL BE REMOVED FROM POST TO POST. ON WEST SIDE OF TRAIL CONTRACTOR SHALL INSTALL 6' CHAIN LINK FENCE BETWEEN END OF SOUND BARRIER WALL AND EDGE OF TRAIL. ON EAST SIDE OF TRAIL CONTRACTOR SHALL TERMINATE CHAIN LINK FENCE AT F-SHAPE PRECAST CONCRETE BARRIER CURB.

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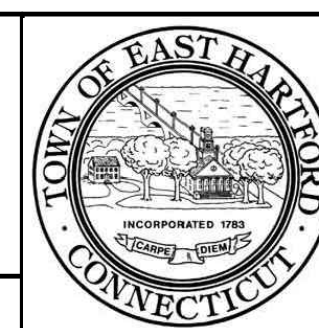
STRAIGHT GRANITE CURB TABLE							
TAN/CURVE	START STA	START OFFSET	END STA	END OFFSET	RADIUS	LENGTH	REVEAL
T1	44+64.46	36.48' LT	44+66.95	31.45' LT	N/A	6.30'	1"
T2	43+63.89	12.52' RT	43+63.83	5.00' RT	N/A	7.52'	6"
T3	43+63.83	5.00' RT	43+68.83	5.00' RT	N/A	5.00'	6"
T4	43+68.83	5.00' RT	43+68.89	12.48' RT	N/A	7.48'	6"
T5	43+63.75	5.00' LT	43+68.75	5.00' LT	N/A	5.00'	6"
T6	43+63.75	5.00' LT	44+39.34	34.34' LT	N/A	52.31'	6"
T7	43+68.75	5.00' LT	44+40.22	29.52' LT	N/A	52.35'	6"
T8	43+83.71	38.40' RT	43+84.79	10.10' RT	N/A	28.33'	6"
T9	43+84.79	10.10' RT	43+84.79	7.00' RT	N/A	3.10'	6"
T10	43+84.79	5.00' LT	44+20.37	10.00' LT	N/A	24.87'	6"
T11	45+16.36	12.00' LT	46+29.07	17.05' LT	N/A	119.23'	6"
T12	44+85.60	42.12' LT	46+52.53	41.25' LT	N/A	181.66'	6"
T13	44+84.61	38.46' LT	46+52.53	37.25' LT	N/A	181.66'	6"
T14	44+62.05	5.00' RT	46+62.74	12.09' RT	N/A	7.11'	6"
T15	44+35.48	49.80' LT	43+47.16	15.75' LT	N/A	38.75'	6"
C9	42+27.95	49.34' LT	42+53.18	61.23' LT	175'	27.92'	6"

CURVED GRANITE CURB TABLE							
CURVE	START STA	START OFFSET	END STA	END OFFSET	RADIUS	LENGTH	REVEAL
C1	42+27.95	49.34' LT	43+47.16	15.75' LT	100'	107.21'	0"
C2	43+47.16	15.75' LT	43+45.91	5.00' LT	30'	9.01'	6"
C3	43+63.89	12.52' RT	43+68.89	14.48' RT	2.5'	7.86'	6"
C4	44+39.34	34.34' LT	44+40.22	29.52' LT	2.5'	7.85'	6"
C5	44+20.37	10.00' LT	45+16.36	12.00' LT	80'	110.05'	6"
C6	44+84.61	38.46' LT	44+85.60	42.12' LT	2'	6.28'	6"
C7	46+52.53	41.25' LT	46+52.53	37.25' LT	2'	6.28'	6"
C8	46+29.07	17.05' LT	46+59.53	5.00' LT	25'	28.72'	6"
C10	42+53.18	61.23' LT	44+35.48	49.80' LT	40'	49.27'	6"
C11	44+39.67	34.42' LT	44+64.46	36.48' LT	66'	38.67'	6"
C12	44+66.95	31.45' LT	44+65.72	28.65' LT	2'	4.14'	6"
C13	44+65.72	28.65' LT	44+40.22	29.52' LT	60.5'	37.27'	6"

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



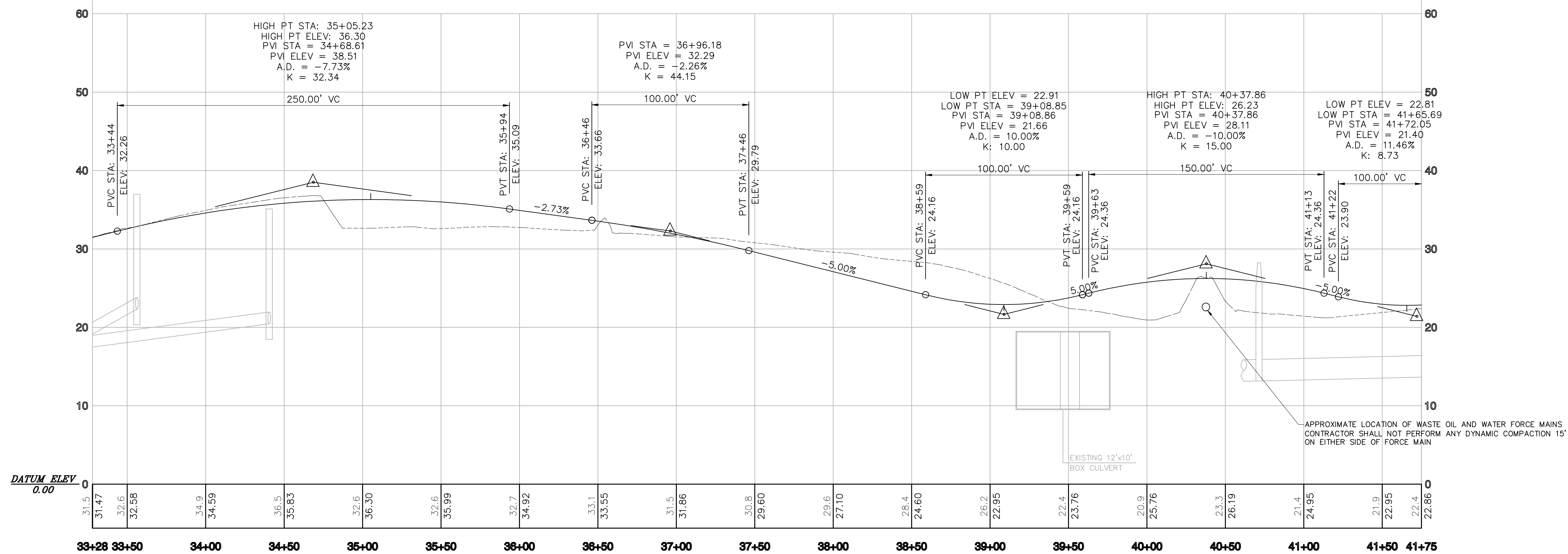
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EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.	
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TOWN:	EAST HARTFORD, CONNECTICUT
DRAWING TITLE:	CURB TIE PLANS

PROJECT NO.:	42-300/301
DRAWING NO.:	TIE-1
SHEET NO.:	28



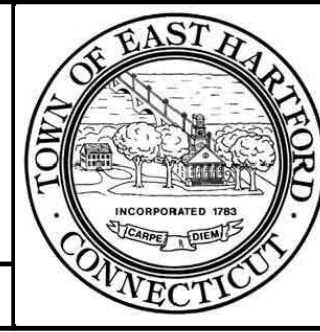




DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

PLANS ISSUED: ISSUED FOR CONSTRUCTION

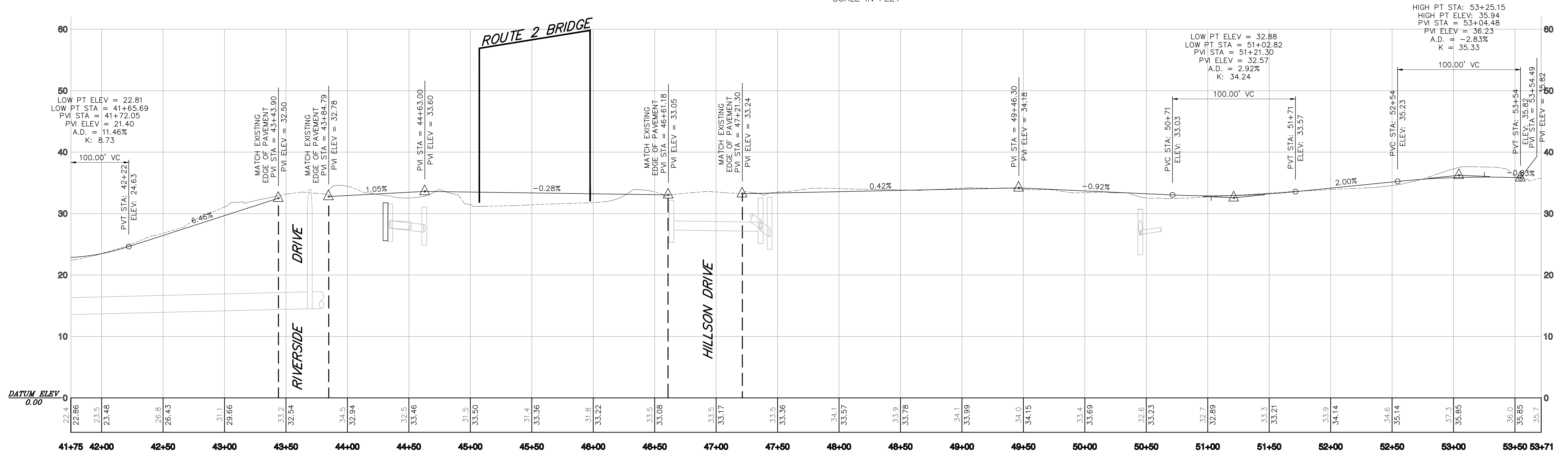
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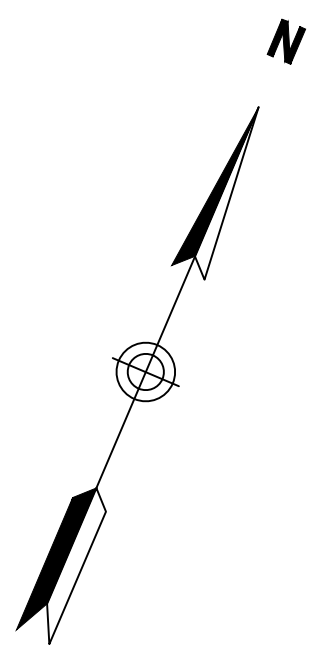


CADD GD-UT_4101900_SW.dwg

GRADING AND DRAINAGE PLAN AND PROFILE

31

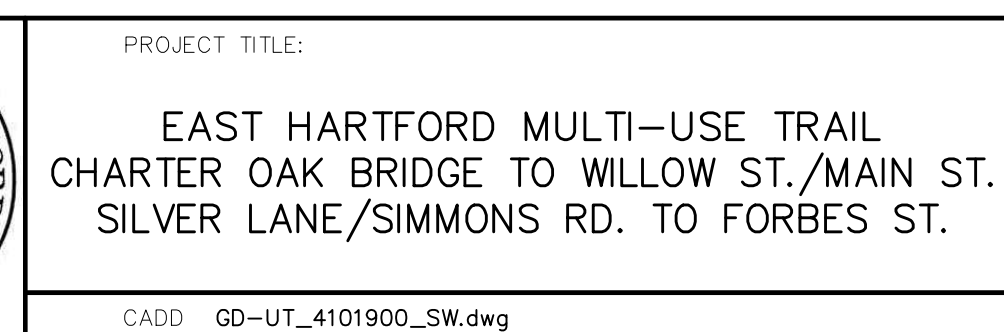
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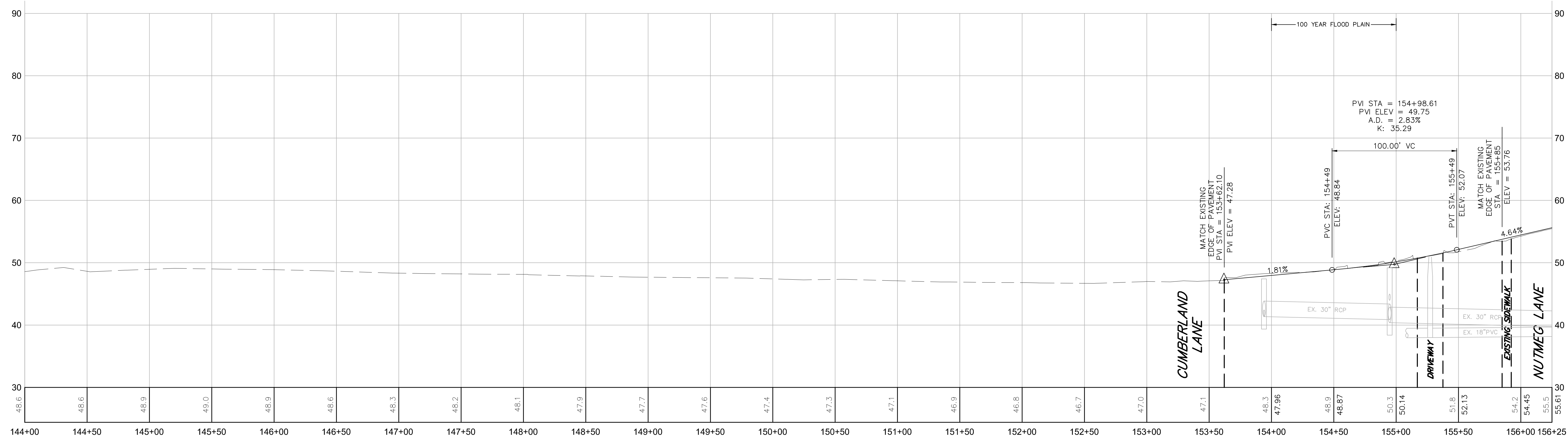
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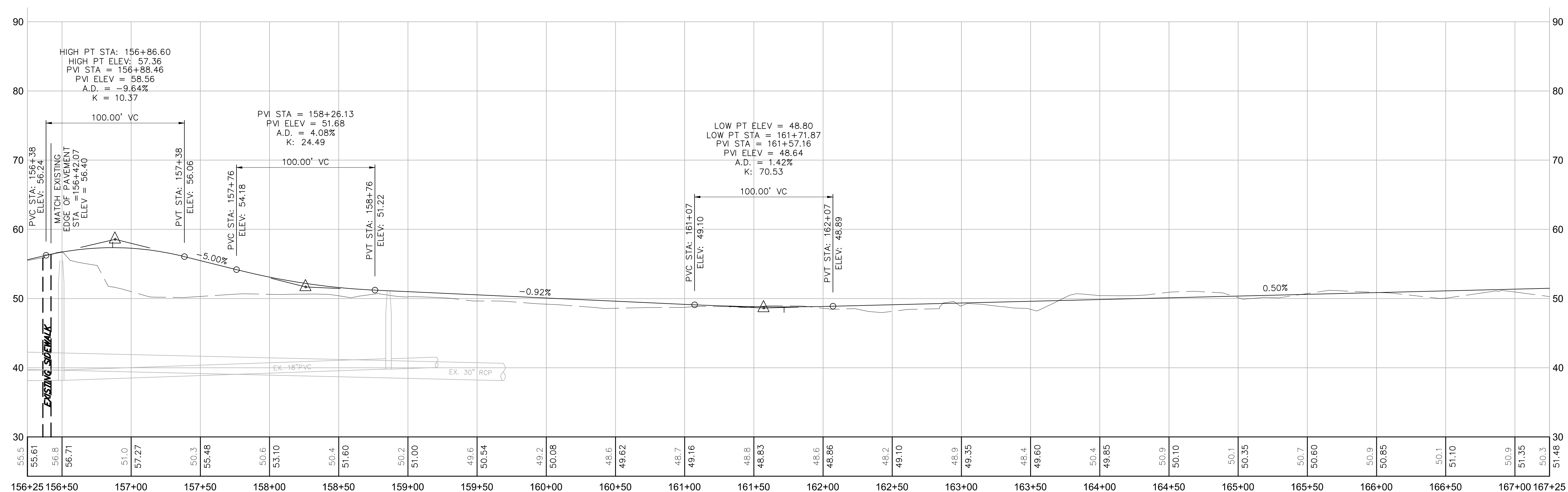
Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services

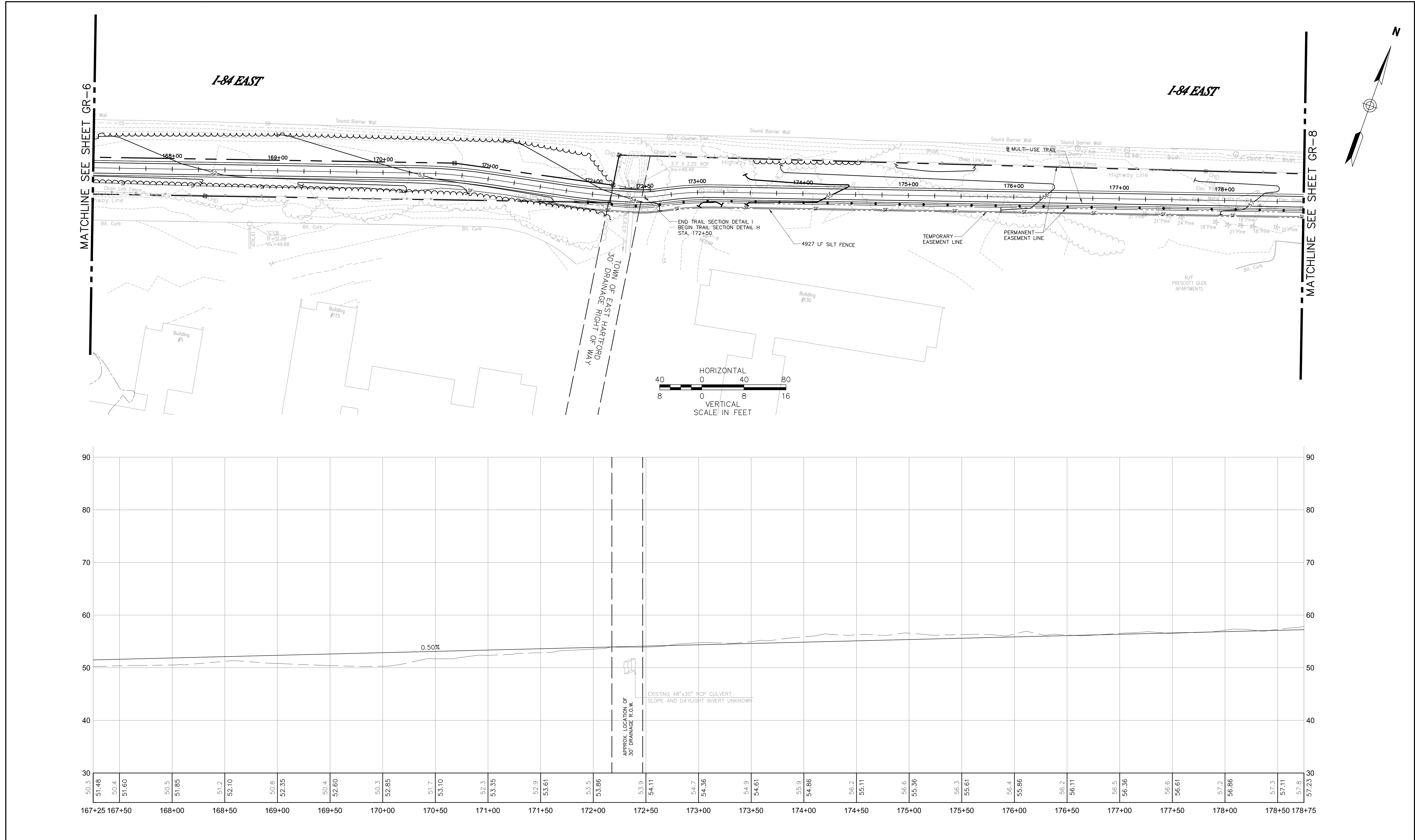
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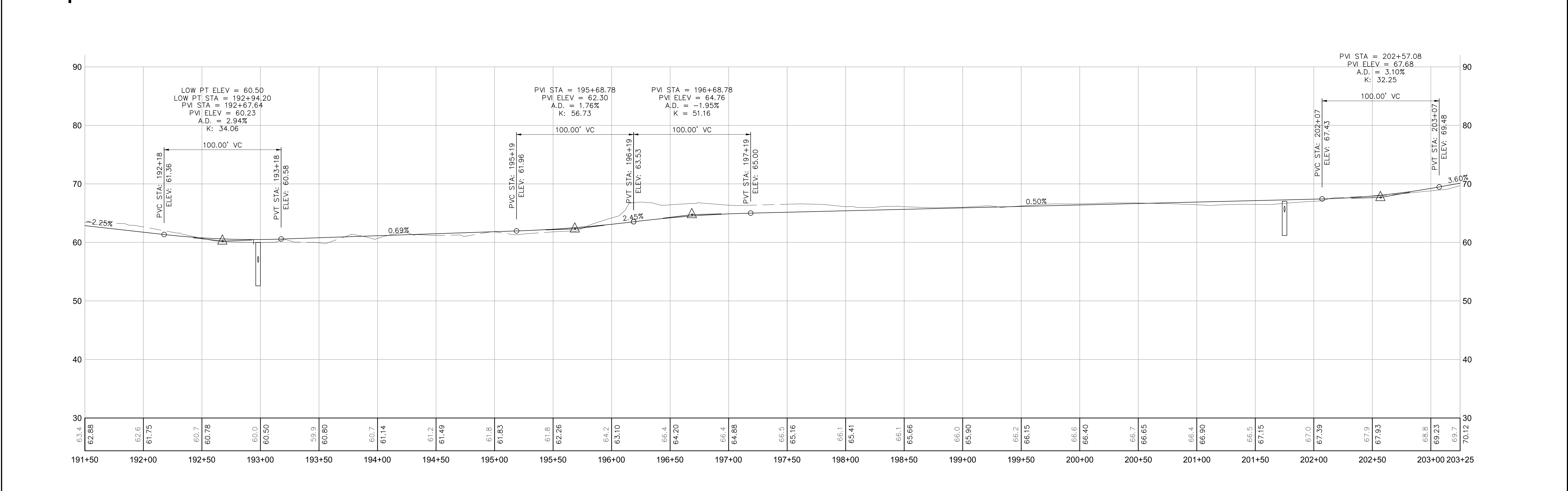
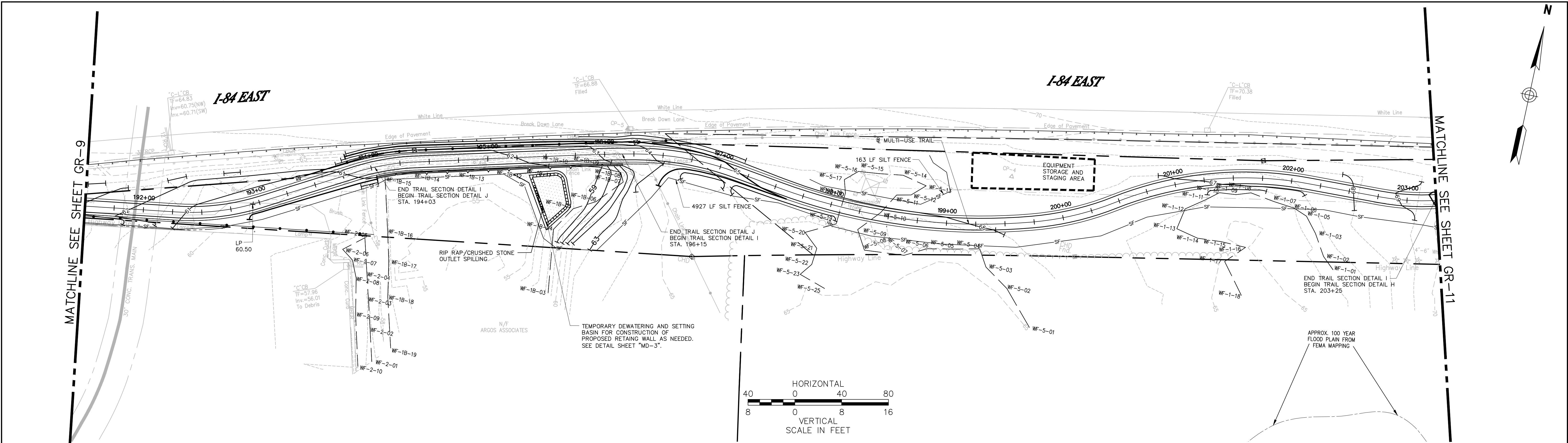
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DRAWING NO.: GR-5
SHEET NO.: 33

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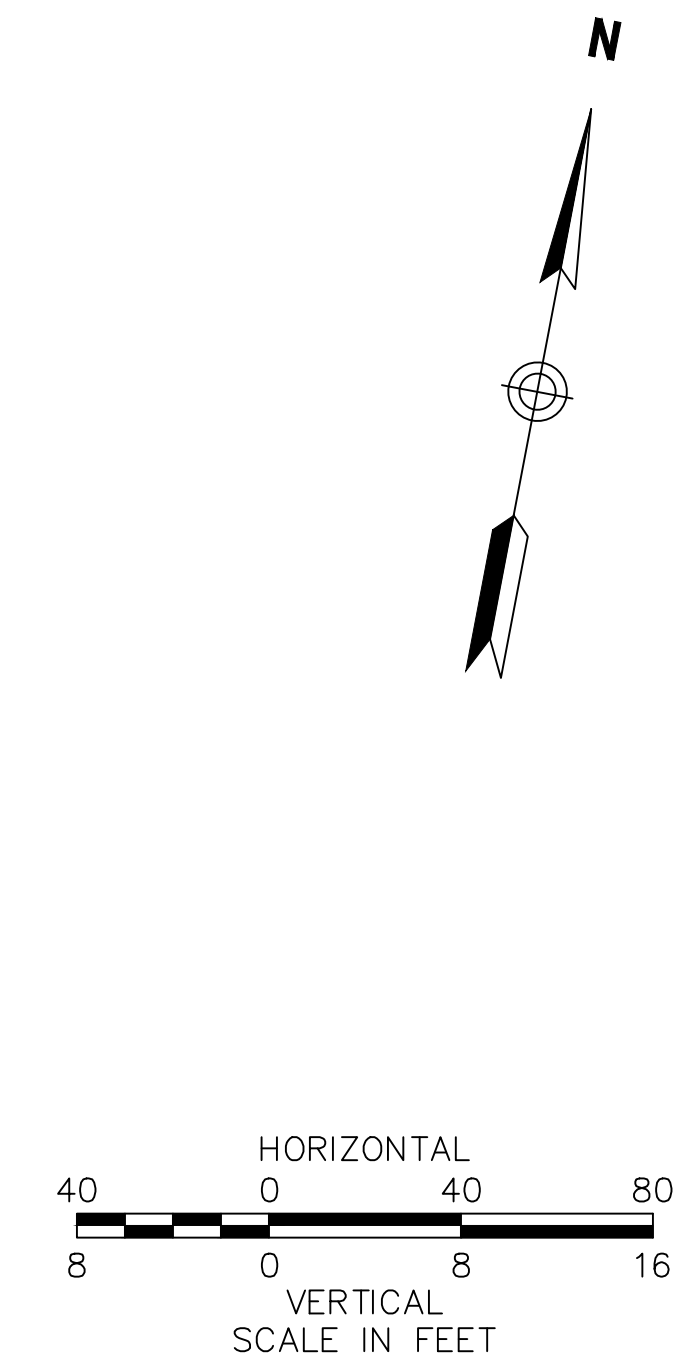
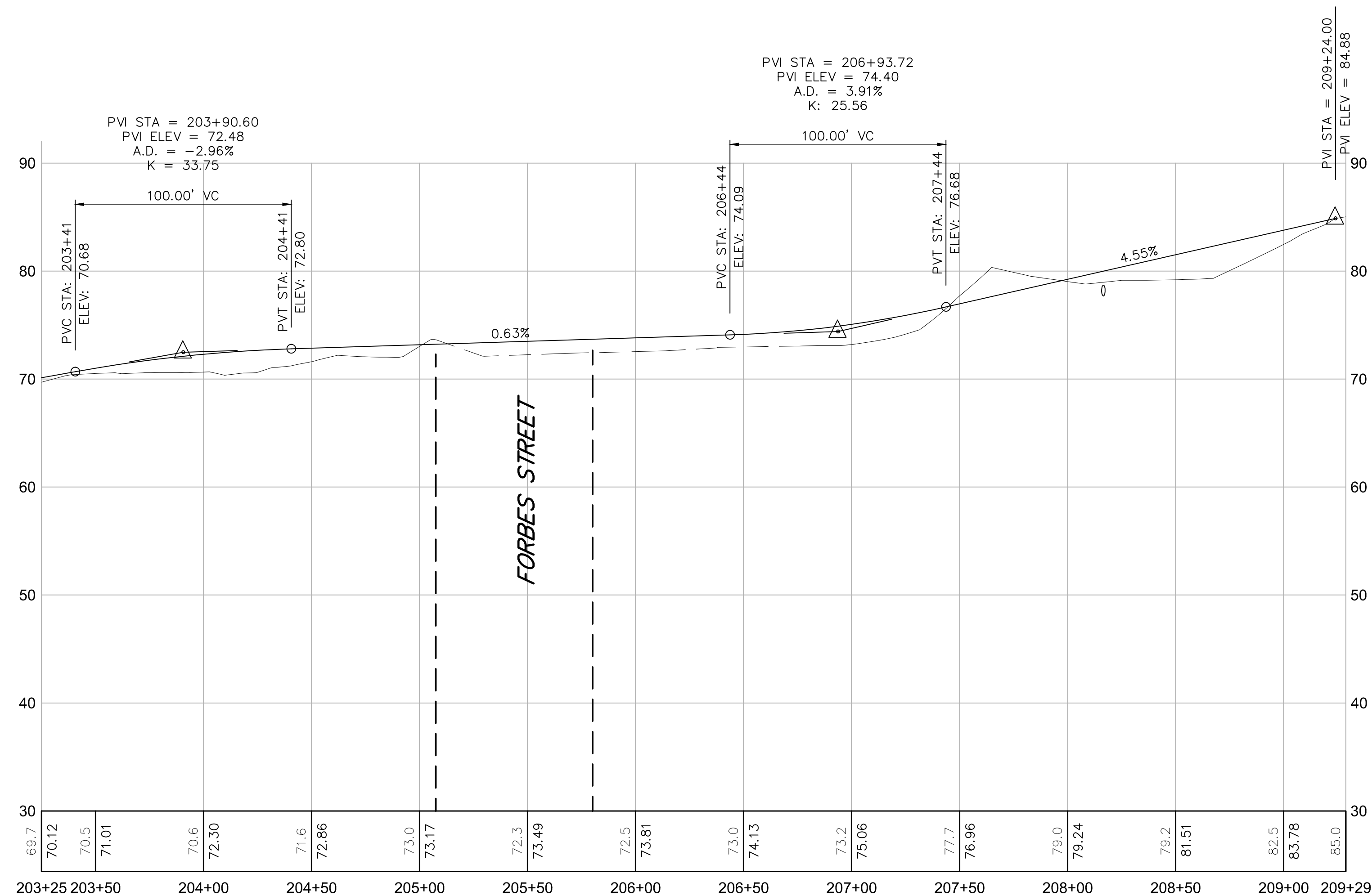
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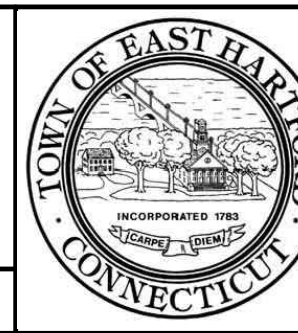


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DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



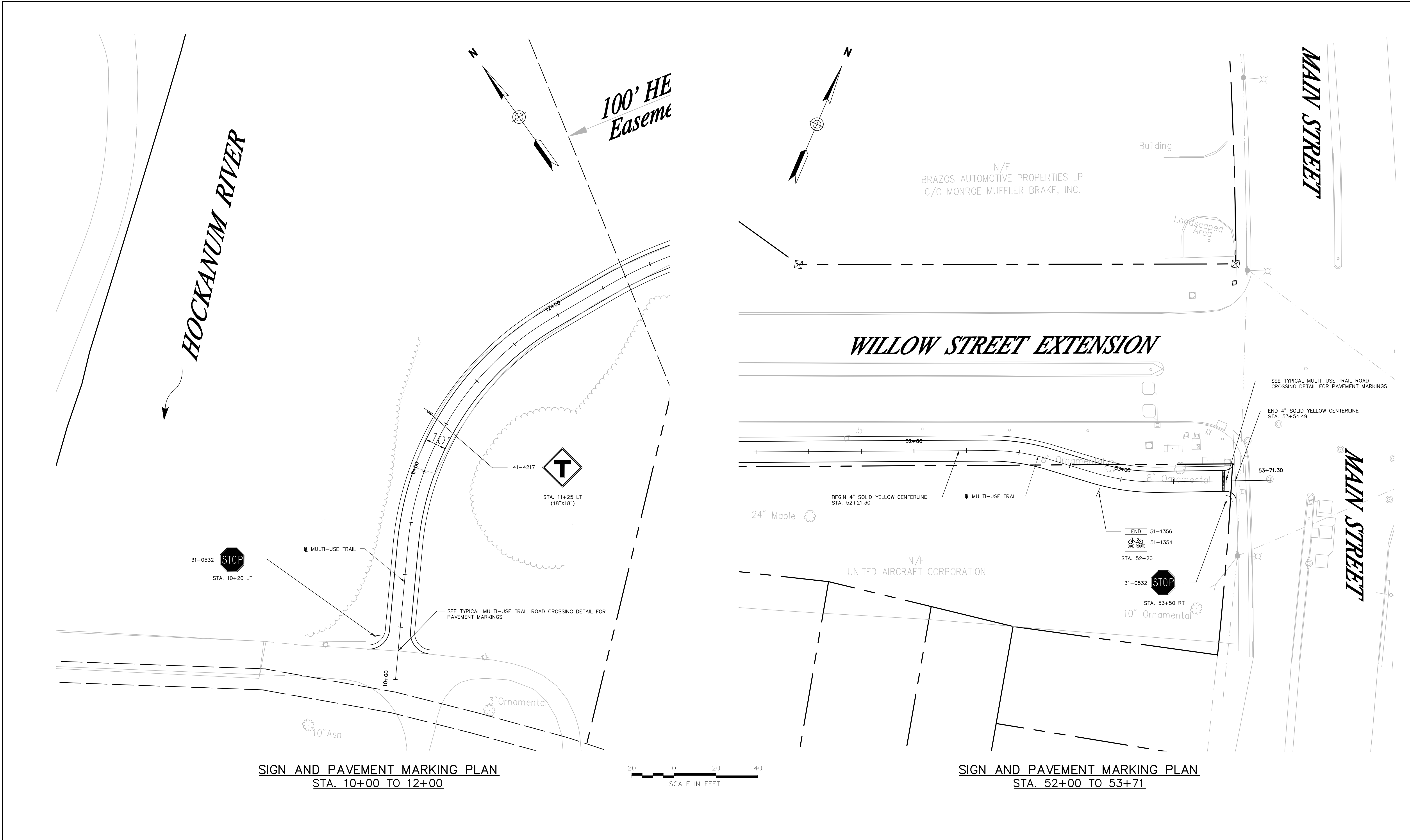
PROJECT TITLE:

EAST HARTFORD MULTI-USE TRAIL
CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.
SILVER LANE/SIMMONS RD. TO FORBES ST.

CADD GD-UT_4101900_NE.dwg

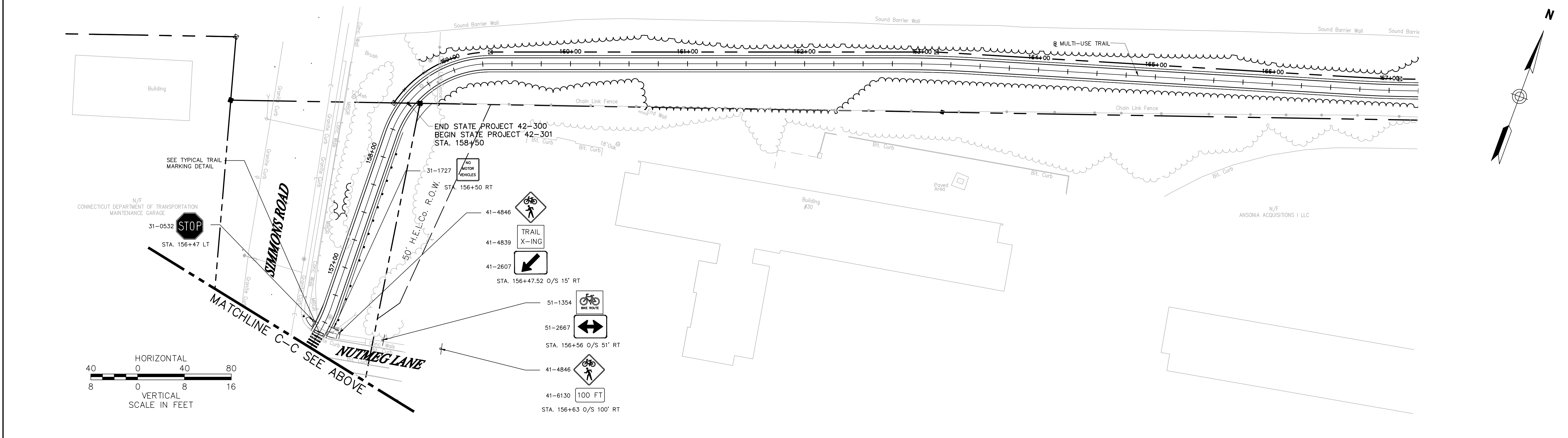
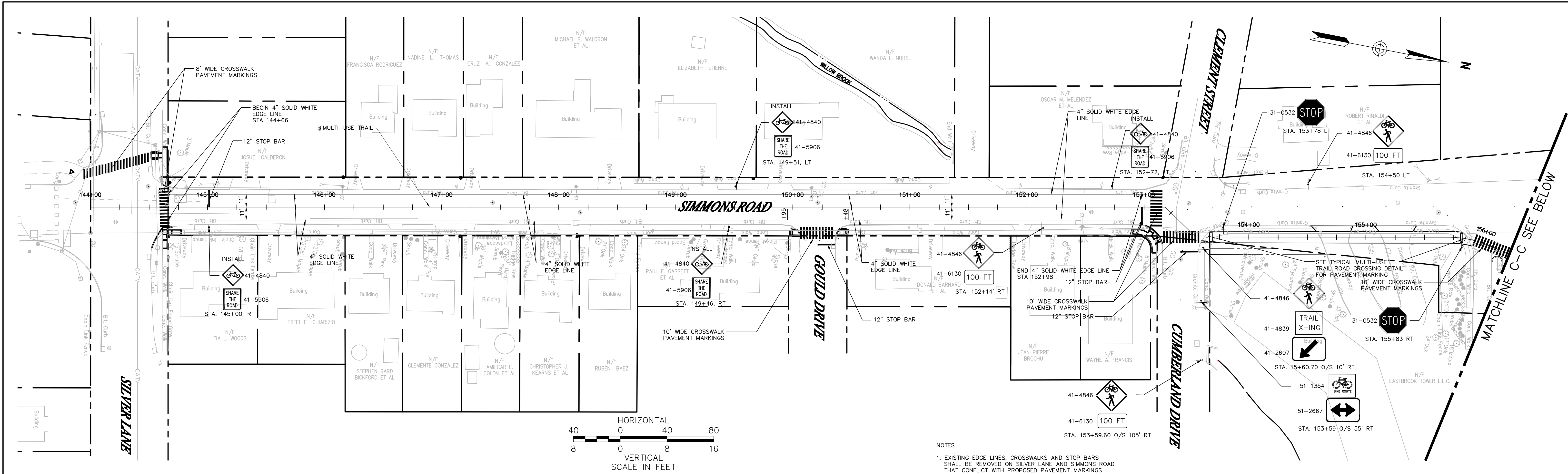
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DRAWING TITLE:	GRADING AND DRAINAGE PLAN AND PROFILE

PROJECT NO.:	42-300/301
DRAWING NO.:	GR-11
SHEET NO.:	39



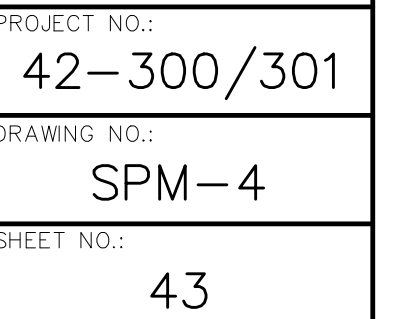
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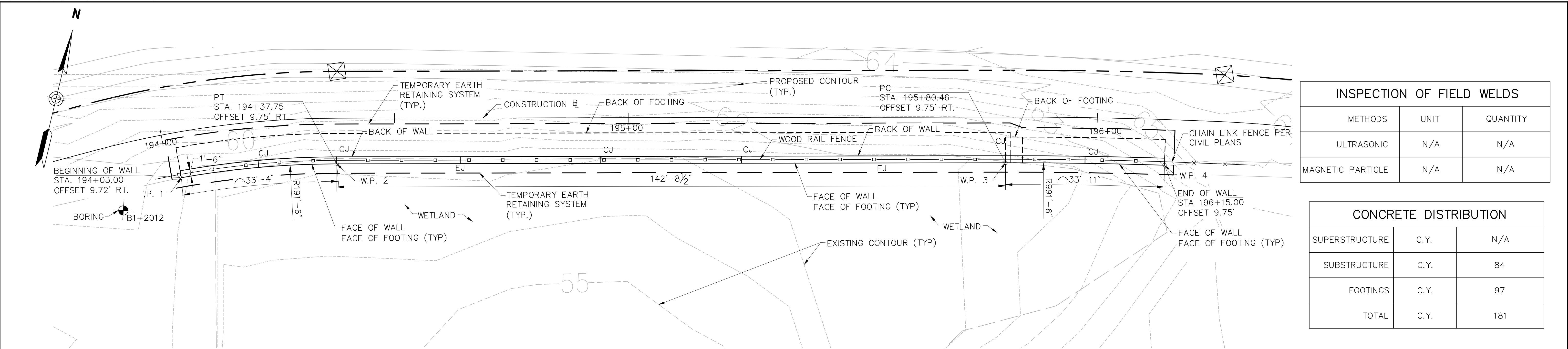
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DATE: 6/1/2015



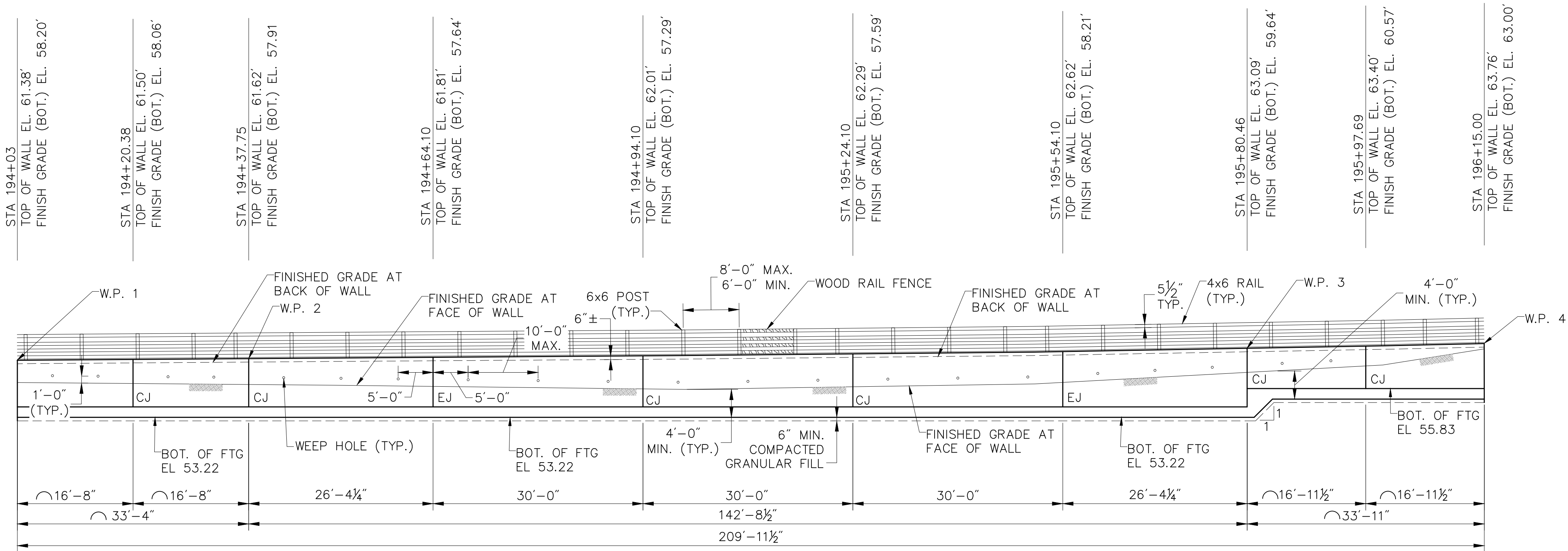


INSPECTION OF FIELD WELDS		
METHODS	UNIT	QUANTITY
ULTRASONIC	N/A	N/A
MAGNETIC PARTICLE	N/A	N/A

CONCRETE DISTRIBUTION		
SUPERSTRUCTURE	C.Y.	N/A
SUBSTRUCTURE	C.Y.	84
FOOTINGS	C.Y.	97
TOTAL	C.Y.	181

WORK POINT DATA				
NO.	STATION	OFFSET	NORTHING	EASTING
W.P. 1	194+03.00	9.72' R	8141462.20	1039308.07
W.P. 2	194+37.75	9.75' R	841473.22	1039339.19
W.P. 3	195+80.46	9.75' R	841509.07	1039477.24
W.P. 4	196+15.00	9.75' R	841517.12	1039510.57

RETAINING WALL GENERAL PLAN
SCALE: 1" = 10'



- NOTES:
- ALL DIMENSIONS ARE ALONG FACE OF WALL.
 - INDICATES LENGTH OF ARC ALONG FACE OF WALL.

RETAINING WALL ELEVATION
SCALE: 1" = 10'

GENERAL NOTES AND CONCRETE NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATION DATED (JANUARY 2013) AND SPECIAL PROVISIONS

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE SPECIFICATIONS, 6TH EDITION (2012), AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2011).

DESIGN STRESSES:
CLASS "A" CONCRETE BASED ON $f'_c = 3000$ PSI
REINFORCEMENT, ASTM A615 GRADE 60 BASED ON $f_y = 60000$ PSI

FOUNDATION PRESSURES:
MAXIMUM DESIGN FOUNDATION PRESSURE = 1.44 TSF (STRENGTH I)
1.05 TSF (SERVICE I)

DIMENSIONS: WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED.

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR THE ENTIRE SUBSTRUCTURE.

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

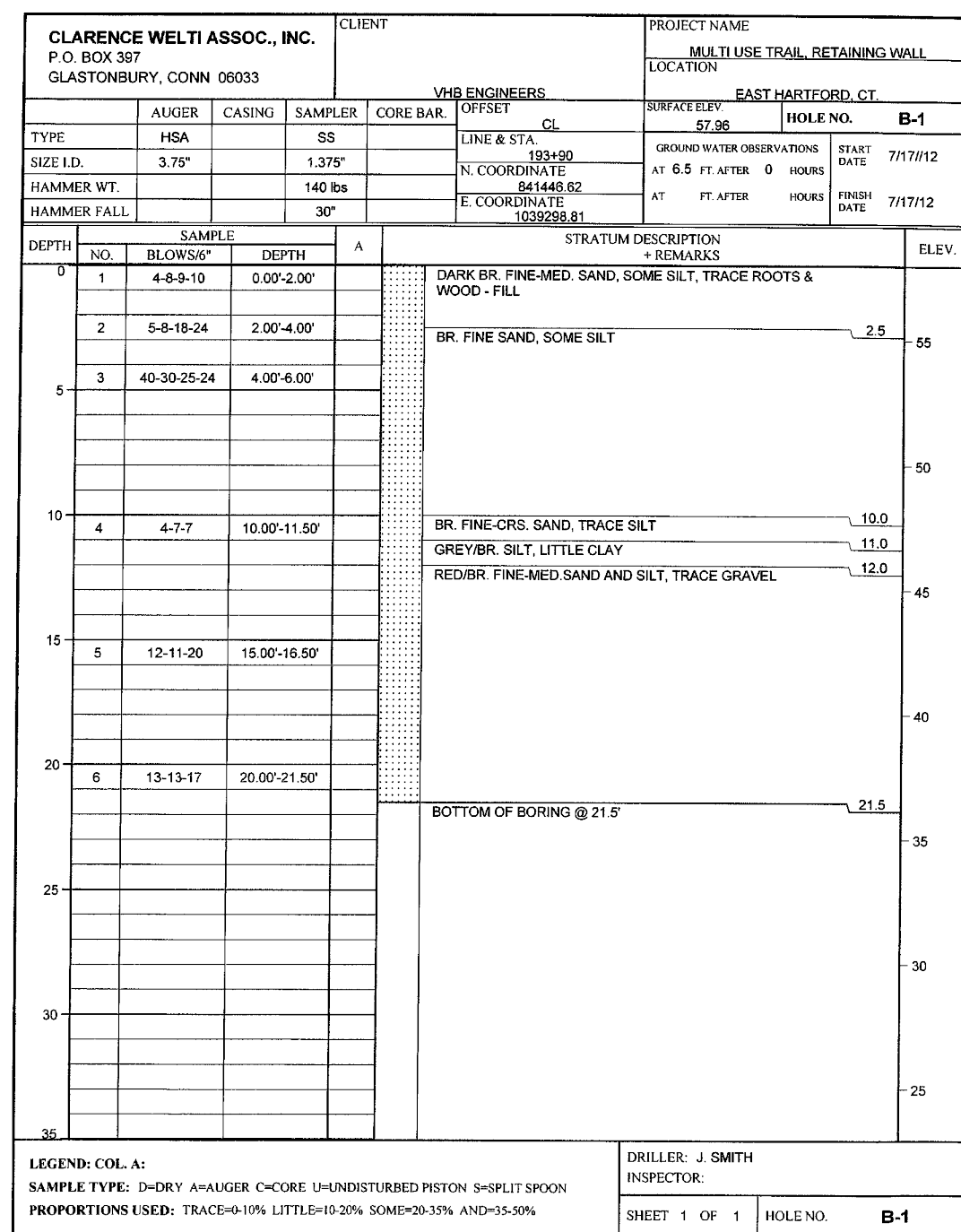
REINFORCEMENT: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A 615 GRADE 60.

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "CLASS 'A' CONCRETE".

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

				DESIGNER: EN	<div>Vanasse Hangen Brustlin, Inc.</div> <div>Transportation Land Development Environmental Services</div>	<div>PROJECT TITLE:</div> <div>EAST HARTFORD MULTI-USE TRAIL CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST. SILVER LANE/SIMMONS RD. TO FORBES ST.</div>	<div>TOWN:</div> <div>EAST HARTFORD, CONNECTICUT</div>	PROJECT NO.: 42-300/301	
				DRAFTER: EN				DRAWING NO.: S-1	
				CHECKED BY: CF				SHEET NO.: 44	
				APPROVED BY: SON					
REV.	DATE	DESCRIPTION REVISIONS			PLANS ISSUED: ISSUED FOR CONSTRUCTION	DATE: 6/1/2015	CADD LM_4101900_NE-st.dwg		



STRUCTURE ITEMS QUANTITIES			
ITEM #	DESCRIPTION	UNIT	QUANTITY
0203000	STRUCTURE EXCAVATION-EARTH	CY	460
0216000	PERVIOUS STRUCTURE BACKFILL	CY	371
0511203	PVC PLASTIC PIPE WEEPHOLE	EA	21
0520038	PREFORMED SILICONE JOINT SEAL	LF	70
0601000	CLASS "A" CONCRETE	CY	181
0602000	DEFORMED STEEL BARS	LB	27150
0708001	DAMPPROOFING	SY	146
0714050A	TEMPORARY EARTH RETAINING SYSTEM	SF	3300
0725002	BAGGED STONE	CF	168
0728008	3/8" CRUSHED STONE	CY	75

BORING NOTES

BORING: BORING WAS TAKEN FOR THE PURPOSE OF DESIGN AND SHOWS CONDITIONS AT BORING POINT ONLY, BUT DO NOT NECESSARILY SHOW THE NATURE OF THE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION.

WATER LEVEL: WATER LEVELS SHOWN ON THE BORING LOG WERE OBSERVED AT THE TIME OF TAKING BORINGS AND DO NOT NECESSARILY SHOW THE TRUE GROUND WATER LEVEL.

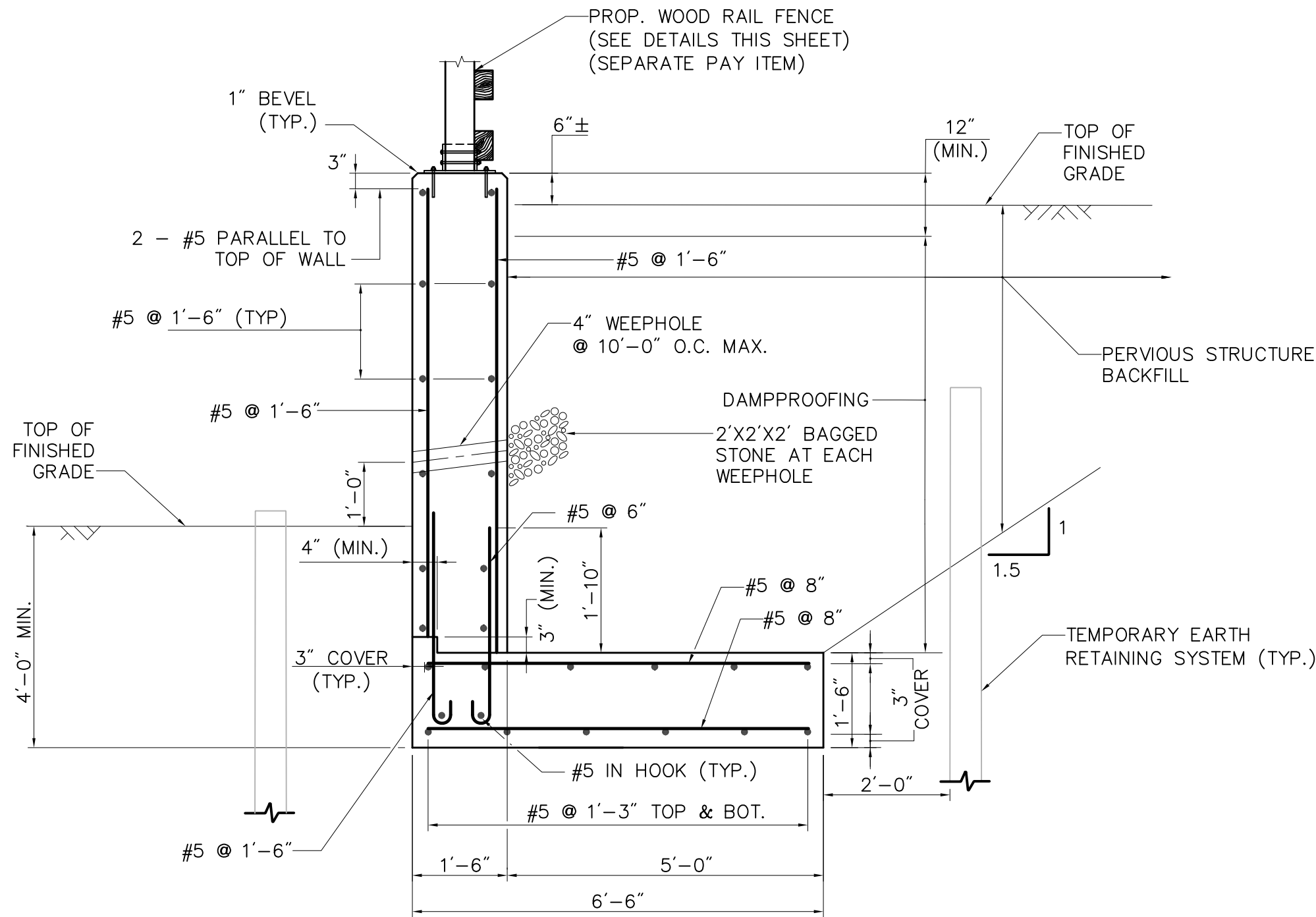
BORING LOG BLOW COUNT: FIGURES IN COLUMNS INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE A 2" O.D. SPLIT SPOON SAMPLER 6" WITH A 140 POUND WEIGHT FALLING 30 INCHES, UNLESS OTHERWISE NOTED.

DATE: ALL BORINGS WERE TAKEN JULY 17, 2012.

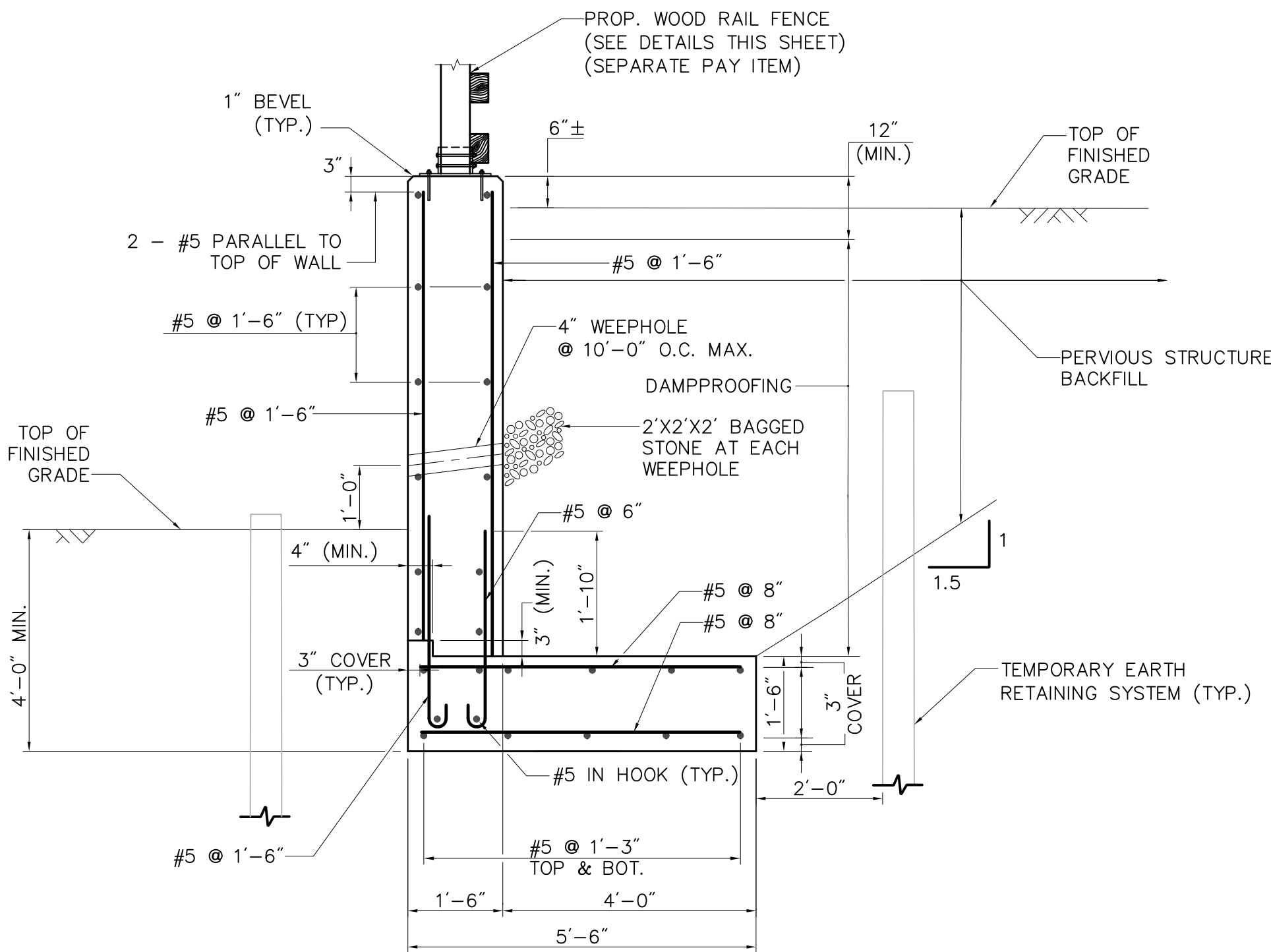
BORING CONTRACTOR: BORINGS WERE MADE BY CLARENCE WELTI ASSOC., INCL, P.O. BOX 397, GLASTONBURY, CT 06033

<div><div><div><div><div></div><div>7-15-15</div></div><div>QUANTITY MODIFIED</div></div></div><div>45</div></div>			DESIGNER: EN	<div><div><div><div><div></div><div>TOWN OF EAST HARTFORD</div><div>CONNECTICUT</div></div><div><div><div><div></div><div>INCORPORATED 1786</div><div>RECEIVED 1997</div></div><div><div><div><div></div><div>Vanasse Hangen Brustlin, Inc.</div><div>Transportation Land Development Environmental Services</div></div></div></div></div></div></div></div></div>	PROJECT TITLE:	TOWN:	PROJECT NO.:
	DRAFTER: EN	EAST HARTFORD, CONNECTICUT	DRAWING NO.:				
	CHECKED BY: CF		S-2				
REV.	DATE	DESCRIPTION	SHEET NO.				
		REVISIONS	45				
APPROVED BY: SON			PLANS ISSUED: ISSUED FOR CONSTRUCTION	DATE: 6/1/2015	CADD: 4101900-ST-DET.dwg	DRAWING TITLE:	
			BORING LOG AND QUANTITIES LIST				

NOTES DELETED



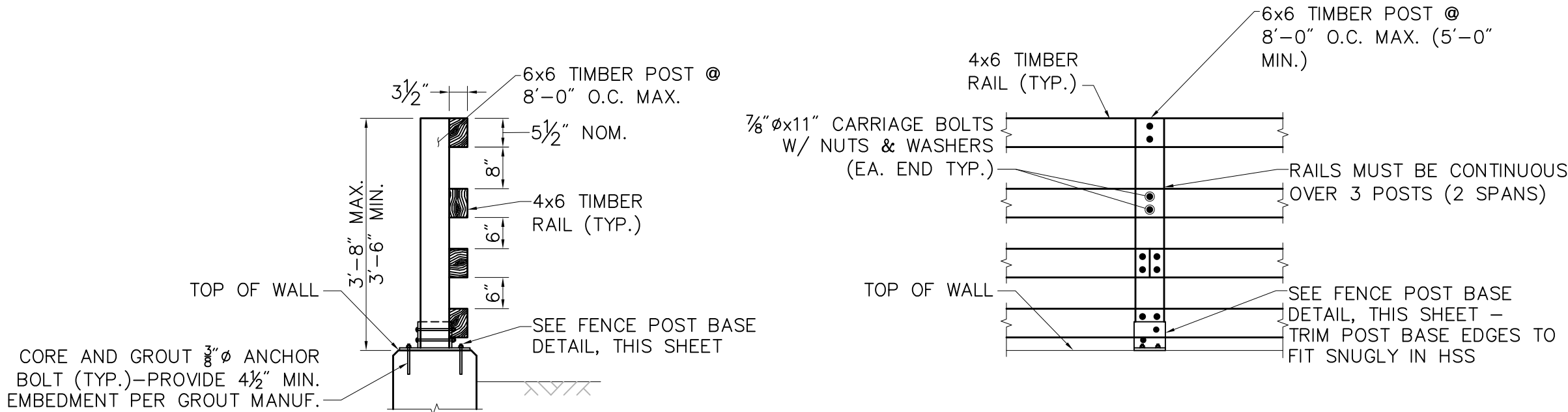
TYPICAL WALL SECTION
STA. 194+03 TO 195+80.46
SCALE: 1/2"=1'



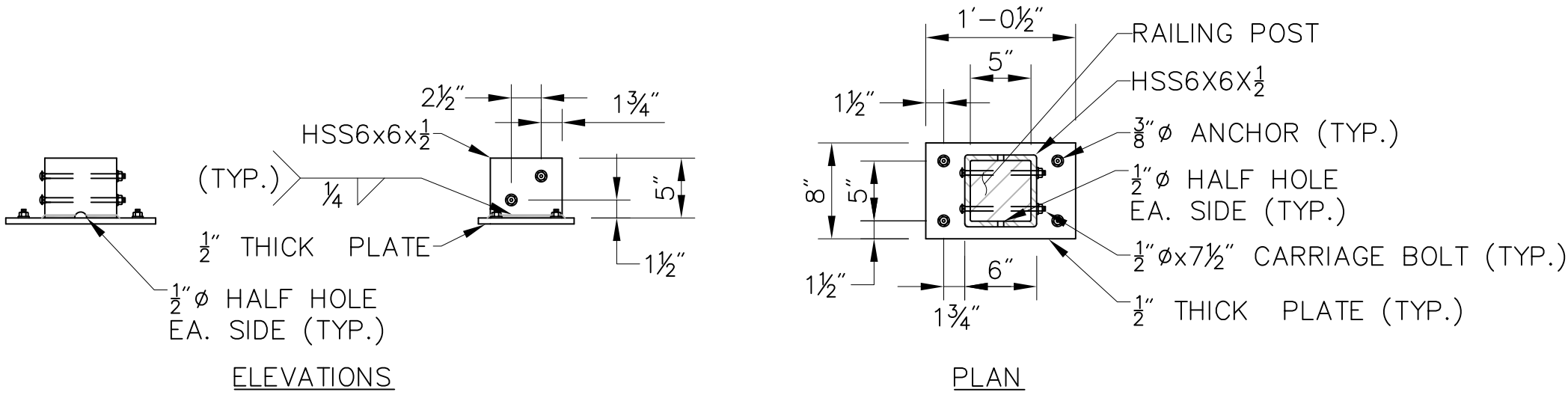
TYPICAL WALL SECTION
STA. 195+80.46 TO 196+15
SCALE: 1/2"=1'

POST ATTACHMENT NOTES:

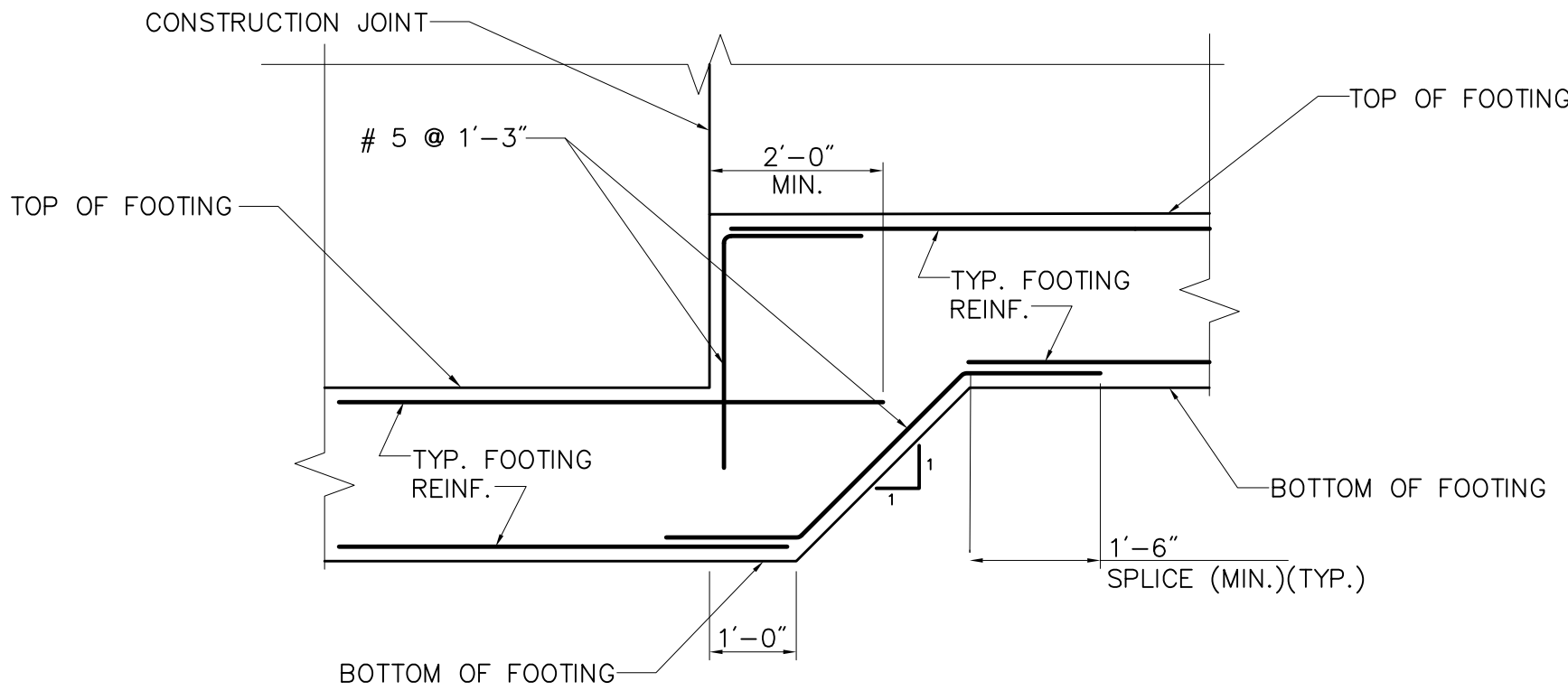
1. PROVIDE CONNDOT APPROVED ADHESIVE GROUT WITH GALVANIZED 3/8"Ø THREADED ROD AND A MINIMUM OF 4 1/2" EMBEDMENT PER GROUT MANUFACTURER.
2. RAILING POST ANCHOR BOLTS SHALL HAVE A MINIMUM ALLOWABLE TENSILE CAPACITY OF 1320 LB/ANCHOR AND SHEAR CAPACITY OF 300 LB/ANCHOR. DEPTH OF EMBEDMENT SHALL BE ACCORDING TO ANCHOR MANUFACTURER SPECIFICATIONS. VERIFY ANCHOR EDGE AND SPACING.
3. DRILL AND PREPARE EMBEDMENT HOLES PER ADHESIVE GROUT MANUFACTURER.
4. POST BASE PLATES AND HSS TUBING TO BE A36 STEEL GALVANIZED IN ACCORDANCE WITH ASTM A123. ALL BOLTS AND RELATED HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.
5. CUT POST BASE TO FIT SNUGLY WITHIN BASE PLATE TUBE STEEL.



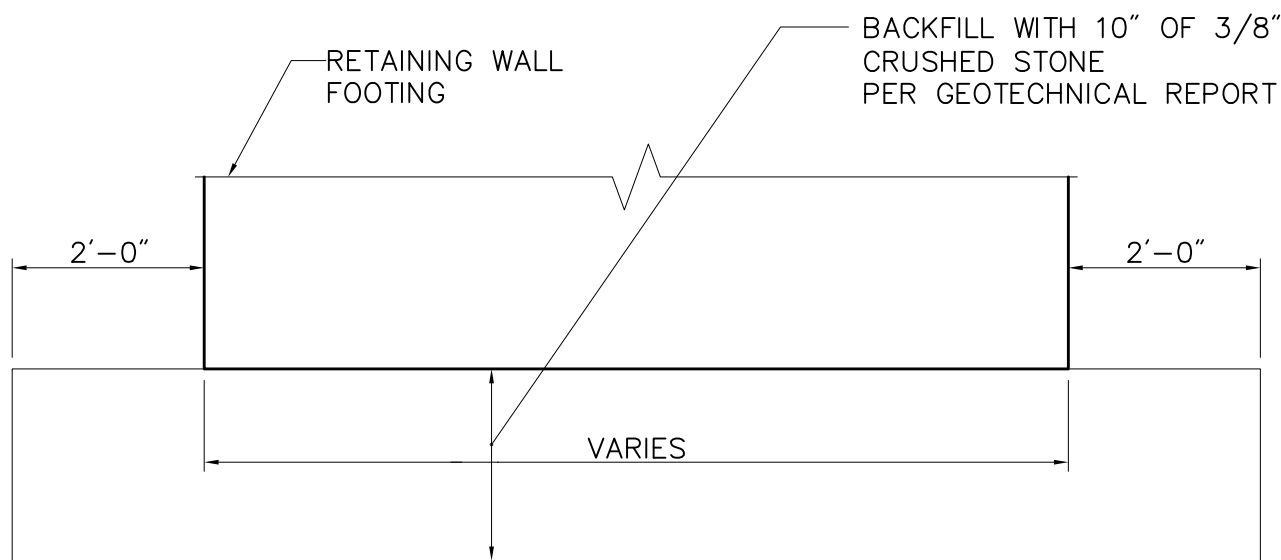
WOOD RAIL FENCE DETAILS
SCALE: 1/2"=1'



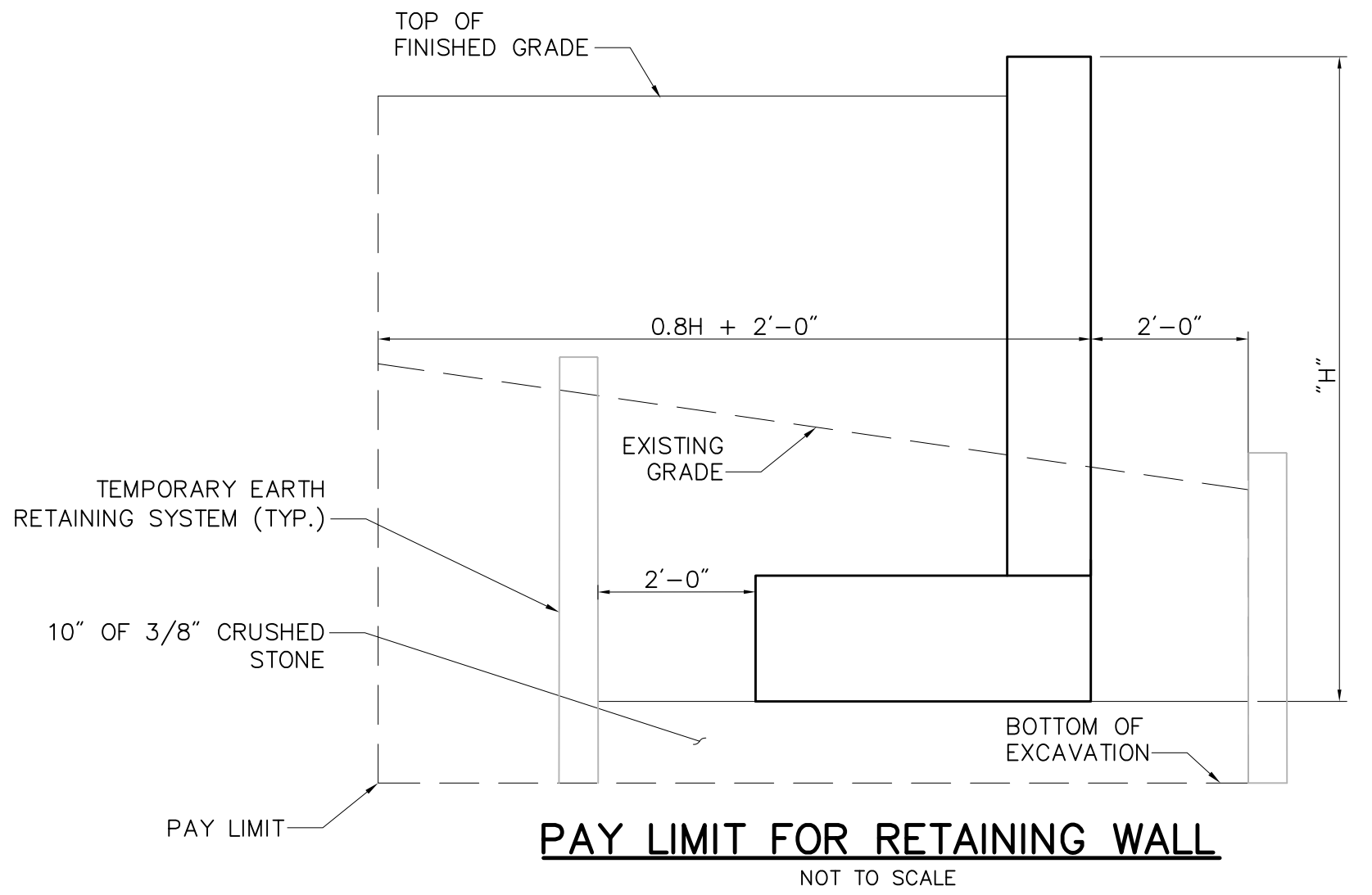
FENCE POST BASE DETAIL
SCALE: 1"=1'



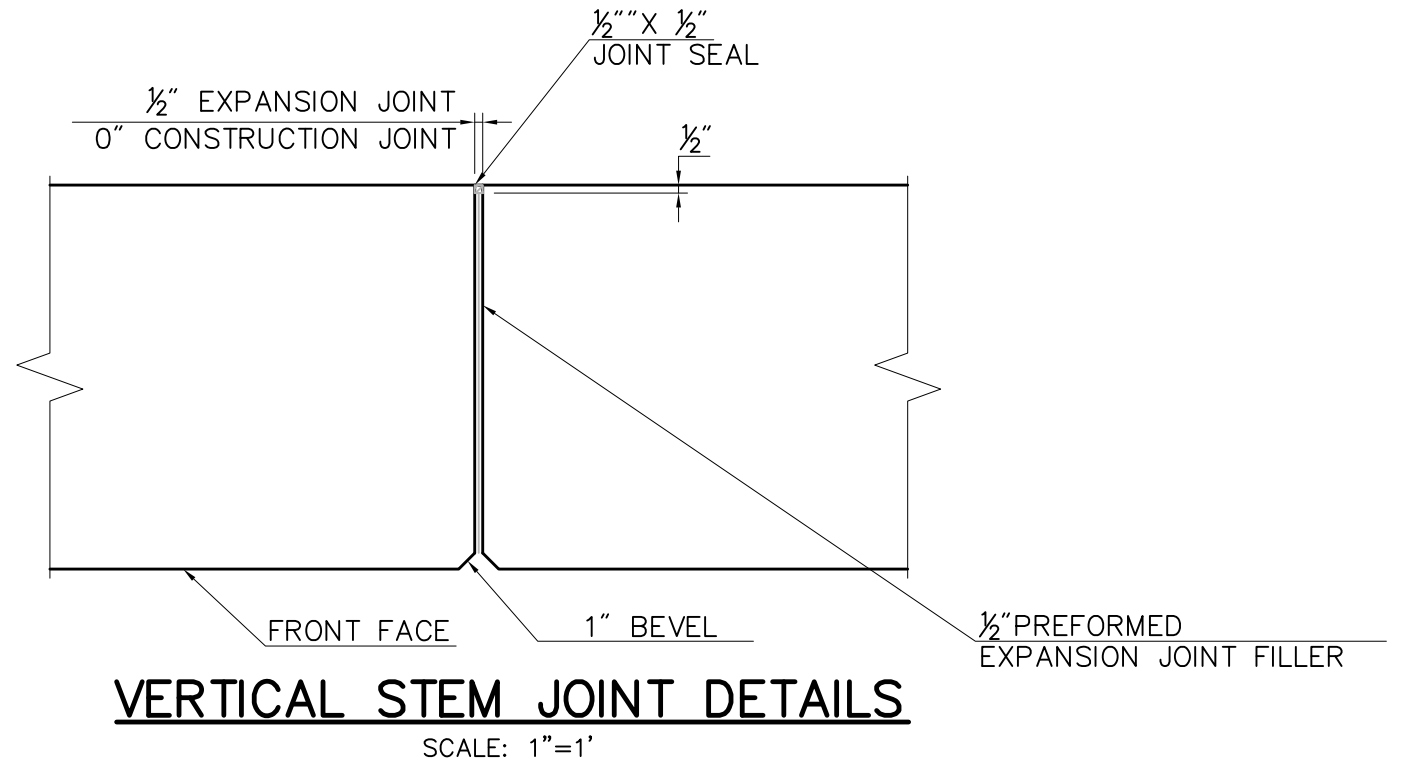
STEPPED UP FOOTING DETAIL
SCALE: 1/2"=1'



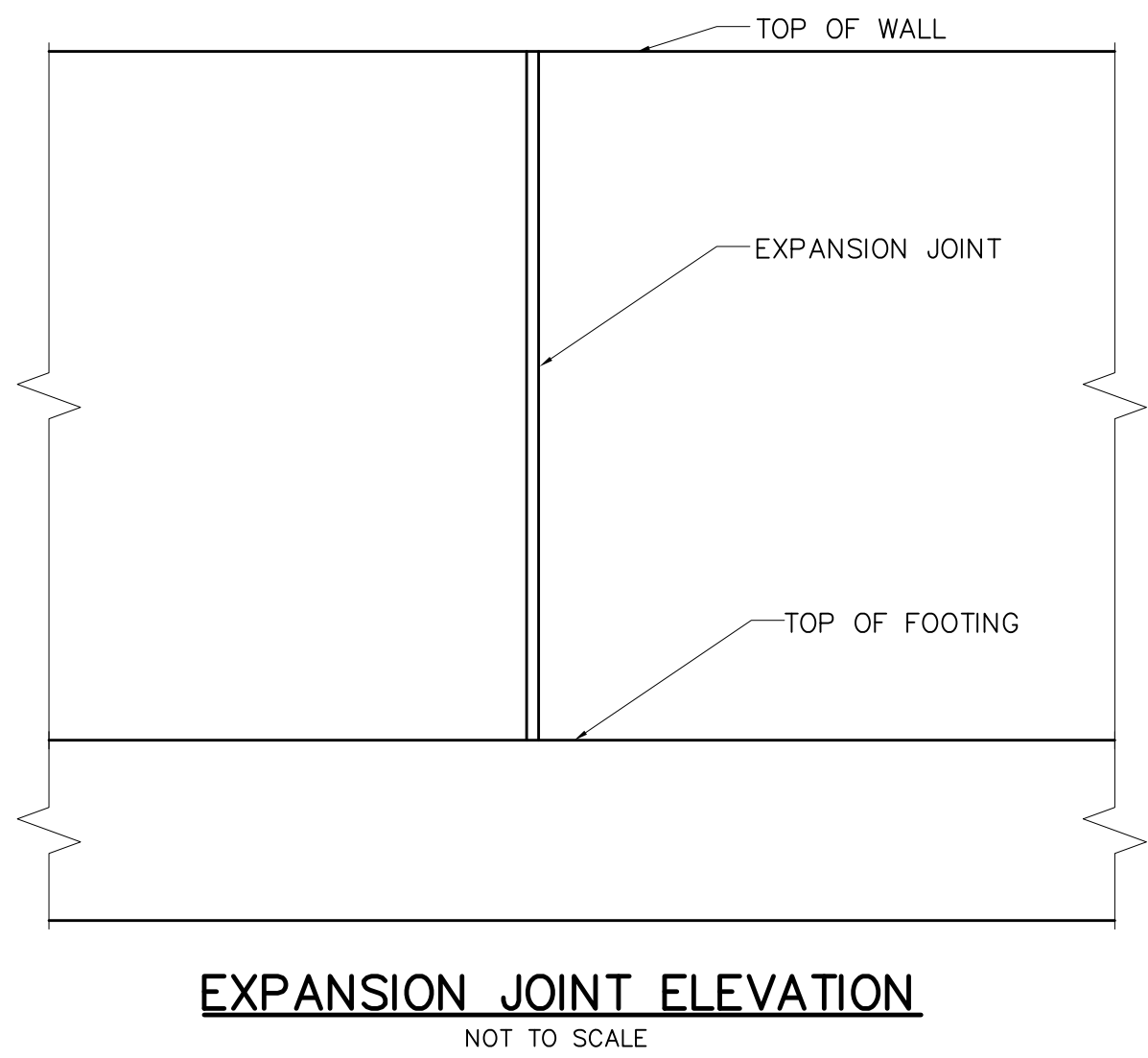
SUBGRADE LIMITS DETAIL
SCALE: 1/2"=1'



- NOTES:**
1. TEMPORARY EARTH RETAINING SYSTEM BELOW PAY LIMITS AND ANY TIEBACKS AND BRACING ASSOCIATED WITH THE SYSTEM SHALL BE INCLUDED IN THE COST, IF REQUIRED.
 2. ANY ADDITIONAL PERVIOUS STRUCTURE BACKFILL REQUIRED OUTSIDE THIS LIMIT SHALL ALSO BE INCLUDED IN THE TRAILWAY PRICE.



- NOTES:**
- JOINTS:**
- JOINT SEAL TO EXTEND FROM TOP OF FOOTING TO TOP OF WALL.
- REINFORCEMENT:**
- NO REINFORCEMENT SHALL PASS THROUGH EXPANSION OR CONTRACTION JOINTS.
- REINFORCEMENT SHALL PASS THROUGH CONSTRUCTION JOINTS.



7-15-15	NOTES DELETED	46
REV.	DATE	DESCRIPTION
		REVISIONS

DESIGNER: EN
DRAFTER: EN
CHECKED BY: CF
APPROVED BY: SON

Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



PROJECT TITLE:
EAST HARTFORD MULTI-USE TRAIL
CHARTER OAK BRIDGE TO WILLOW ST./MAIN ST.
SILVER LANE/SIMMONS RD. TO FORBES ST.
CADD 4101900-ST-DET.dwg

TOWN:
EAST HARTFORD, CONNECTICUT
DRAWING TITLE:
RETAINING WALL
SECTIONS AND DETAILS

PROJECT NO.:
42-300/301
DRAWING NO.:
S-3
SHEET NO.:
46

CLARENCE WELTI ASSOC., INC. P O BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL, RETAINING WALL LOCATION EAST HARTFORD, CT						
				VHB ENGINEERS								
TYPE		AUGER	CASING	SAMPLER	CORE BAR	OFFSET	CL	SURFACE ELEV 57.95		HOLE NO.	B-1	
SIZE I.D.		3.75"		1.375"		LINE & STA	193+90	GROUND WATER OBSERVATIONS AT 6.5 FT AFTER 0 HOURS		START DATE	7/17/12	
HAMMER WT.				140 lbs		N. COORDINATE	841446.62	AT FT AFTER HOURS		FINISH DATE	7/17/12	
HAMMER FALL				30"		E. COORDINATE	1039298.81					
DEPTH		SAMPLE		STRATUM DESCRIPTION + REMARKS								ELI.V.
NO.		BLOWS/6"		DEPTH		A						
0		1		4-8-9-10		0.00'-2.00'		DARK BR. FINE-MED. SAND, SOME SILT, TRACE ROOTS & WOOD - FILL				
		2		5-8-18-24		2.00'-4.00'		BR. FINE SAND, SOME SILT				2.5
		3		40-30-25-24		4.00'-6.00'						55
5												
												50

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL					
				LOCATION EAST HARTFORD, CT.							
VHB ENGINEERS				CORE BAR		HOLE NO. B-3					
TYPE HSA				CASING SS		SURFACE ELEV. 24.09					
SIZE I.D. 3.75"				SAMPLER 1.375"		LINE & STA. 27+0					
HAMMER WT. 140 lbs				GROUND WATER OBSERVATIONS AT NONE FT. AFTER 0 HOURS		START DATE 12/14/12					
HAMMER FALL 30"				N. COORDINATE 835188.86		FINISH DATE 12/14/12					
				E. COORDINATE 1028072.06							
DEPTH		SAMPLE		A		STRATUM DESCRIPTION + REMARKS					
0		1 11-20-15-0 0.00'-2.00'				BR. FINE-CRS. SAND AND GRAVEL, TRACE SILT - FILL					
2		5-11-20-22 2.00'-4.00'				RED/BR. FINE-CRS. SAND, SOME SILT, LITTLE GRAVEL & ASPHALT - FILL					
3		22-12-12-10 4.00'-6.00'				LIGHT BR. FINE SAND, SOME SILT					
						BOTTOM OF BORING @ 6.0'					
5											
10											
15											
20											
25											
30											
35											
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%						DRILLER: J. SMITH INSPECTOR:		SHEET 1 OF 1		HOLE NO. B-3	

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL					
				LOCATION EAST HARTFORD, CT.							
VHB ENGINEERS				CORE BAR		HOLE NO. B-4					
TYPE HSA				CASING SS		SURFACE ELEV. 36.52					
SIZE I.D. 3.75"				SAMPLER 1.375"		LINE & STA. 34+50					
HAMMER WT. 140 lbs				GROUND WATER OBSERVATIONS AT NONE FT. AFTER 0 HOURS		START DATE 12/14/12					
HAMMER FALL 30"				N. COORDINATE 834834.74		FINISH DATE 12/14/12					
				E. COORDINATE 1028726.47							
DEPTH		SAMPLE		A		STRATUM DESCRIPTION + REMARKS					
0		1 25-20-15-22 0.00'-2.00'				GREY/BR. FINE-CRS. SAND AND GRAVEL, TRACE SILT - FILL					
2		30-24-25-12 2.00'-4.00'									
3		12-8-8-6 4.00'-6.00'				RED/BR. FINE SAND, SOME SILT, LITTLE GRAVEL - FILL					
						BOTTOM OF BORING @ 6.0'					
5											
10											
15											
20											
25											
30											
35											
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%						DRILLER: J. SMITH INSPECTOR:		SHEET 1 OF 1		HOLE NO. B-4	

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL					
				LOCATION EAST HARTFORD, CT.							
VHB ENGINEERS				CORE BAR		HOLE NO. B-5					
TYPE HSA				CASING SS		SURFACE ELEV. 23.53					
SIZE I.D. 3.75"				SAMPLER 1.375"		LINE & STA. 42+0					
HAMMER WT. 140 lbs				GROUND WATER OBSERVATIONS AT NONE FT. AFTER 0 HOURS		START DATE 12/13/12					
HAMMER FALL 30"				N. COORDINATE 834183.27		FINISH DATE 12/13/12					
				E. COORDINATE 1029061.15							
DEPTH		SAMPLE		A		STRATUM DESCRIPTION + REMARKS					
0		1 11-20-15-0 0.00'-2.00'				TOPSOIL					
2		5-11-20-22 2.00'-4.00'				BR. FINE-MED. SAND, LITTLE TO SOME SILT, TRACE GRAVEL					
3		22-12-12-10 4.00'-6.00'				BOTTOM OF BORING @ 5.0'					
						NOTE: BORINGS TAKEN BY HAND					
5											
10											
15											
20											
25											
30											
35											
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%						DRILLER: J. SMITH INSPECTOR:		SHEET 1 OF 1		HOLE NO. B-5	

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL				
				VHB ENGINEERS		LOCATION EAST HARTFORD, CT				
		AUGER	CASING	SAMPLER	CORE BAR	OFFSET	CL	SURFACE ELEV	HOLE NO.	B-6
TYPE		HSA		SS		LINE & STA	49+50	GROUND WATER OBSERVATIONS	START DATE 12/13/12	
SIZE I.D.		3.75"		1.375"		N. COORDINATE	834416.24	AT 16066 FT. AFTER 0 HOURS		
HAMMER WT.				140 lbs		E. COORDINATE	1629755.50	AT FT. AFTER HOURS	FINISH DATE 12/13/12	
HAMMER FALL				30"						
DEPTH	SAMPLE			A	STRATUM DESCRIPTION + REMARKS					ELEV.
0	NO.	BLOWS/6"	DEPTH							
	1	5-6-7-12	0.00'-2.00'		TOPSOIL					0.5
					BR. FINE-CRS. SAND, TRACE TO LITTLE SILT					
	2	10-10-14-15	2.00'-4.00'							30
	3	10-7-6-5	4.00'-6.00'							
5					BOTTOM OF BORING @ 6.0'					6.0
										25
10										20
15										15
20										10
25										5
30										0
35										
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%								DRILLER: J. SMITH INSPECTOR:		
								SHEET 1 OF 1	HOLE NO. B-6	

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL				
				VHB ENGINEERS		LOCATION EAST HARTFORD, CT				
		AUGER	CASING	SAMPLER	CORE BAR	OFFSET	CL	SURFACE ELEV	HOLE NO.	B-7
TYPE		HSA		SS		LINE & STA	154+00	GROUND WATER OBSERVATIONS	START DATE 12/13/12	
SIZE I.D.		3.75"		1.375"		N. COORDINATE	839543.96	AT 16066 FT. AFTER 0 HOURS		
HAMMER WT.				140 lbs		E. COORDINATE	1038043.66	AT FT. AFTER HOURS	FINISH DATE 12/13/12	
HAMMER FALL				30"						
DEPTH	SAMPLE			A	STRATUM DESCRIPTION + REMARKS					ELEV.
0	NO.	BLOWS/6"	DEPTH							
	1	1-2-18-5	0.00'-2.00'		TOPSOIL					0.56
					DARK BR. FINE-MED. SAND, SOME SILT, TRACE GRAVEL					
	2	5-5-5-7	2.00'-4.00'		LIGHT BR. FINE-CRS. SAND, TRACE SILT					2.0
	3	8-12-8-8	4.00'-6.00'							45
5					BOTTOM OF BORING @ 6.0'					6.0
										40
10										35
15										30
20										25
25										20
30										15
35										
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%								DRILLER: J. SMITH INSPECTOR:		
								SHEET 1 OF 1	HOLE NO. B-7	

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT		PROJECT NAME MULTI USE TRAIL				
				VHB ENGINEERS		LOCATION EAST HARTFORD, CT				
		AUGER	CASING	SAMPLER	CORE BAR	OFFSET	CL	SURFACE ELEV	HOLE NO.	B-8
TYPE						LINE & STA	162+50	GROUND WATER OBSERVATIONS	START DATE 12/13/12	
SIZE I.D.						N. COORDINATE	840447.36	AT 4.0 FT. AFTER 0 HOURS		
HAMMER WT.						E. COORDINATE	1036342.36	AT FT. AFTER HOURS	FINISH DATE 12/13/12	
HAMMER FALL										
DEPTH	SAMPLE			A	STRATUM DESCRIPTION + REMARKS					ELEV.
0	NO.	BLOWS/6"	DEPTH							
					TOPSOIL					
					GREY/BR. FINE-MED. SAND, SOME SILT, TRACE GRAVEL					2.0
					GREY/BR. FINE-CRS. SAND, TRACE SILT					3.5
5					BOTTOM OF BORING @ 5.0'					5.0
					NOTE: BORINGS TAKEN BY HAND					
10										40
15										35
20										30
25										25
30										20
35										15
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%								DRILLER: J. SMITH INSPECTOR:		
								SHEET 1 OF 1	HOLE NO. B-8	